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Condition of Education
In Connecticut

Elementary and Secondary

Meeting *The Challenge*

1984

State of Connecticut

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We can, whenever and wherever we choose, successfully teach all children whose schooling is of interest to us; we already know more than we need to do that; and whether or not we do it must finally depend on how we feel about the fact that we haven't [done this] so far.

Ronald Edmonds*

*The late Ronald Edmonds was associated with the Center for Urban Studies at Harvard University and with the Center for School Improvement at Michigan State University.

ONCE UPON A TIME education was prized and teachers respected. We must rekindle this attitude in people's minds and hearts.

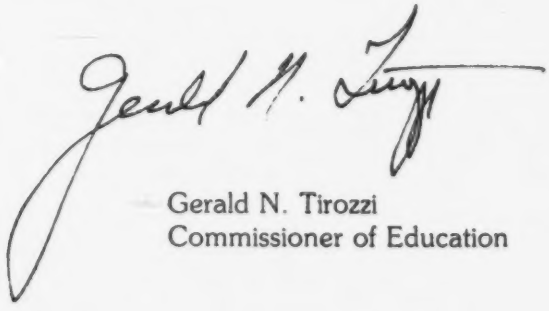
To care deeply, to develop a commitment to an idea or an ideal, to support an undertaking, one must know about it, what it stands for and where it can lead. We want every citizen of Connecticut to become familiar with Connecticut's public schools, with what they are doing well and how they can be improved. To introduce you to the condition of elementary and secondary education today and to point the way toward a future we can all be proud of, the staff of the Connecticut Department of Education has put together this publication entitled *Meeting the Challenge*.

The data, presented in graphs and tables and discussed in the text, give a wide-angle view of Connecticut today—its people, its schools, the teachers and students in the classrooms, the programs and services offered, the achievements of students, the funding available for education and how it is being spent to accomplish our basic goals of equity and excellence.

Each section of the report concludes with the theme of the report, "Meeting the Challenge." These paragraphs provide a look ahead, based on the directions in which we are moving now and the goals and objectives to which your State Board of Education and the staff of the State Department of Education are committed for the '80s.

Connecticut's most important resource is its people. How well they are educated will determine both their future and Connecticut's. We must instill in all our citizens, particularly in our young people, the desire to learn and, at the same time, we must provide them with learning opportunities that are suitable for each individual.

NOW IS THE TIME for us to join in making these dreams and aspirations a reality in Connecticut.



Gerald N. Tirozzi
Commissioner of Education

Connecticut: Its People and Its Schools

Connecticut's schools exist to serve its citizens. The right of every Connecticut citizen to free public elementary and secondary education was established in the state's constitution which says there "shall always be free public ... schools in the state." Appropriate legislation to implement that basic concept appears in Section 10-4a of the General Statutes which identifies the educational interests of the state and mandates that the state shall be responsible for providing "each child ... equal opportunity to receive a suitable program of educational experiences" and that "each school district shall finance at a reasonable level at least equal to the minimum expenditure requirement ... an education program designed to achieve this end."

Fundamental to a determination of the needs which the public schools must serve are the ever-changing characteristics of the state's population, recorded each decade by the U.S. Bureau of the Census. Equally important in planning a dynamic program is a knowledge of Connecticut's schools—their evolution, their achievements and their shortcomings—such as the profile provided by data and statistics collected and analyzed by the State Department of Education.

It is from this dual perspective—a view of Connecticut's people and its schools—that this report begins.

Connecticut's People

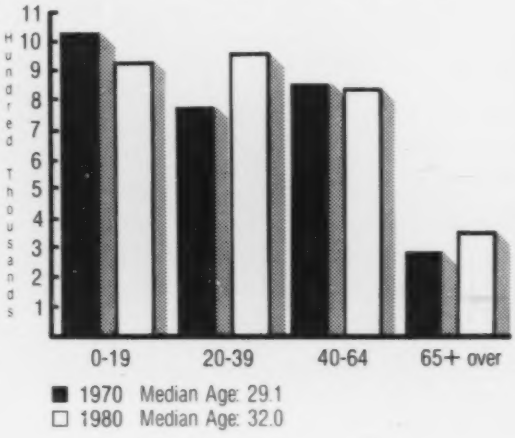
Connecticut, with a relatively small population of 3,107,576 according to the 1980 census—or with an estimated 3,137,340 in 1983, according to the 1984 edition of the *Connecticut Register and Manual*—is the second most populous of the New England states. Unlike several of its neighboring states, it has shown a consistent growth in population over the years. Of its total populations, 35.2 percent of Connecticut's people live in the urban centers, 43.6 percent live in the surrounding suburban areas and 21.2 percent live in rural areas.

The third smallest state in the nation, it covers 5,009 square miles or 3,205,760 acres, according to the *Connecticut Almanac*. An unusual feature of the state is that it has no one "big city," but a number of important and well-known medium-sized ones—ranging from Bridgeport, with a population of 142,670 according to the 1984 edition of the *Connecticut Register and Manual*, through Hartford, New Haven, and Waterbury, to Stamford, with a population of 103,360.

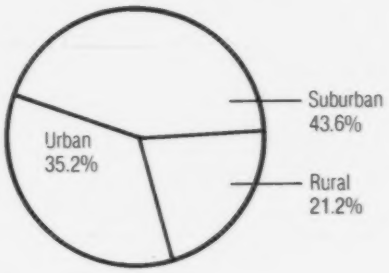
Connecticut's population is clustered around the state's 11 largest cities. The census refers to these areas, each of which includes a city and its surrounding towns, as standard metropolitan statistical areas (SMSA). The 1980 census reports the population of 11 SMSAs in the state as follows:

Connecticut's Population 3,107,576
Male 1,498,034 Female 1,609,542

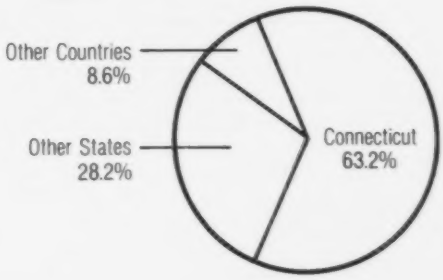
Connecticut's Population 1970 vs 1980



Residence

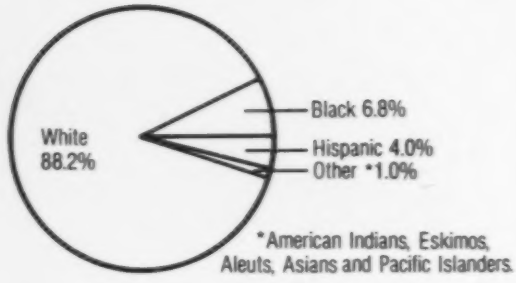


Geographic Origin

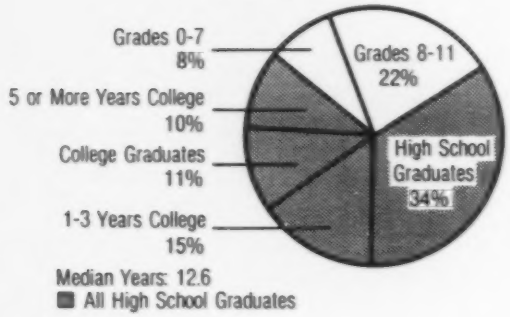


Source: U.S. Bureau of Census

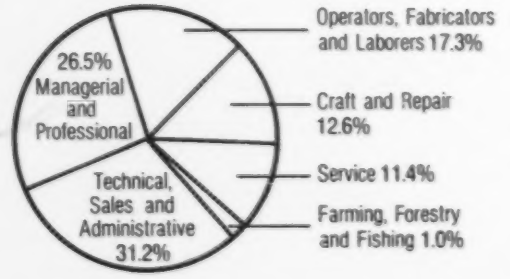
Ethnic Roots



Education of Connecticut Adults
25 Years and Over
Total: 1,900,164



Connecticut's Occupations



Source: U.S. Bureau of Census

Hartford	726,114
New Haven	417,592
Bridgeport	395,455
New London/Norwich	248,554
Waterbury	228,178
Stamford	198,854
Danbury	146,405
New Britain	142,241
Norwalk	126,692
Bristol	73,762
Meriden	57,118

The remaining residents, more than 300,000, are spread throughout the northwest and northeast corners of Connecticut.

There are 1,093,678 households, an increase of 17.3 percent since the 1970 census, and the number of persons per household is 2.76. There are 420,456 families with children under 18, a four percent decrease since the 1970 census, and 71,774 of these are single-parent families headed by a female.

To get an overview of the diversity of Connecticut's population which the state education system must serve, consider the following facts and statistics:

- The state's population breaks down, according to age, in this way: 19 and under, 935,612 or 30.1 percent (in 1970, this age group was 1,117,492 or 36.8 percent); 20 to 39, 967,944 or 31.14 percent (in 1970, 771,987 or 25.46 percent); 40 to 64, 839,106 or 27.0 percent (in 1970, 853,322 or 28.14 percent); 65 and over, 364,864 or 11.74 percent (in 1970, 288,908 or 9.52 percent). The median age of the population in 1980 was 32.0; in 1970 it was 29.1. Of those age seven through 15, 84.97 percent were enrolled in public schools in 1982.

- The people of the state are highly educated. According to the recent census, of 1,900,164 people 25 years old and over, 1,336,404 or 70.3 percent are high school graduates. Of the graduates, 203,652 also have four years of college education and an additional 188,912 have five years or more of college or university education. Of this group of 1,900,164 who are 25 and over, the median number of years of school completed is 12.6. However, 152,218 did not complete eighth grade and an additional 253,766 did not graduate from high school.

- The people of the state are comparatively wealthy. In 1982 the per capita personal income of the state's population was $13,748, ranking it the third highest state in the nation in this category. The personal income per child of school age was $76,592, ranking the state second here. But despite Connecticut's wealth as a state, two of its largest cities are among the poorest in the nation (Hartford is fourth poorest; New Haven is seventh poorest).

- Despite Connecticut's wealth, six percent of all white residents live below the poverty level, 25 percent of all blacks, and 33 percent of all Hispanics, according to

Growing Up: At Risk in Connecticut published in 1984. One in 15 adults in the state lives below the poverty level, which in 1983 was set by the federal government at $8,220 for a family of three.

According to the 1980 census, there are 50,809 families in the state below the poverty level. This is about six percent of all families in the state. The number of families below the poverty level has increased about 25 percent since 1970. Even more startling is the 66 percent increase in families headed by a female. In 1980, such families numbered 30,172. In 27,995 of these families there were children under 18 years of age. These facts inevitably affect the mission of the public schools and the challenge that teachers and the Department of Education must meet.

- Of the 1,482,309 citizens of Connecticut in the labor force, their occupations are: 392,957, managerial and professional specialty occupations; 462,325, technical, sales and administrative support occupations; 168,312, service occupations; 14,147, farming, forestry, and fishing occupations; 168,983, precision production, craft, and repair occupations; and 257,585, operators, fabricators, and laborers.

- The population of 3,107,576 is made up of 1,690,571 females and 1,498,005 males. The total breaks down according to race and Hispanic origin as follows:

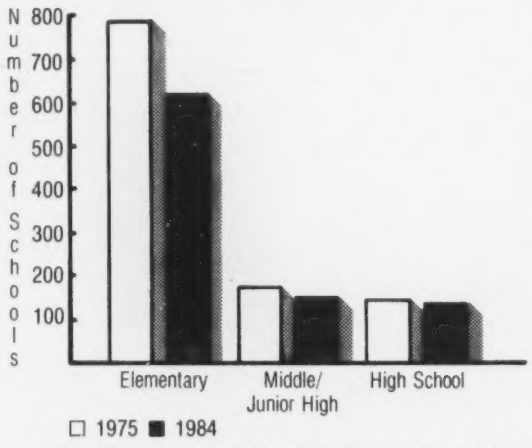
White	2,735,418
Black	212,984
Hispanic	124,499
Asians and Pacific Islanders	18,102
American Indians, Eskimos, and Aleuts	4,533
Other	12,040
Total	3,107,576

- Although much of the population is "local," well over one-third is made up of "outsiders." Sixty-three and two-tenths percent of the population was born in the state; 28.2 percent was born in other states; and 8.6 percent was born in foreign countries.

  The population is mobile. Of the 3.1 million people reported in the 1980 census, 41.0 percent were living in different houses in 1975.

The recent census also reports that in the homes of children of school age (those five through 17) the following languages are spoken: English only, 568,778; Spanish, 35,027; Italian, 8,948; French, 6,801; Polish, 2,583, and German, 2,353. In the homes of those 18 and over, roughly the same proportion follows: English only, 1,935,152; Italian, 82,320; Spanish, 67,823;

Number of Public Schools in CT
1975 vs 1984



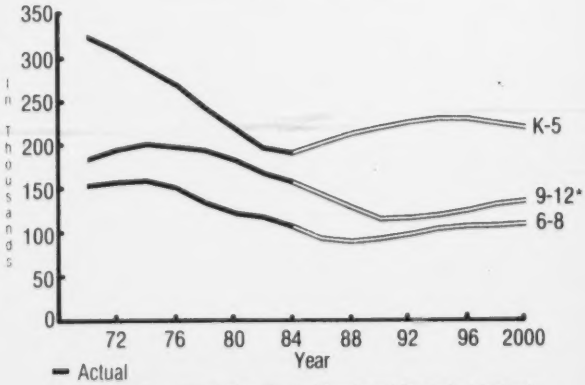
*Excludes E.O. Smith, Gilbert, Norwich Free, and Woodstock Academies and Alternative High Schools
Source: CT Department of Education

Fall	Elementary	Middle/ Jr. High	Senior High*	Alternative/ Prekindergarten/ Special Education	Total
1984	618	153	137	30	938
1983	621	155	138	34	948
1982	643	160	139	36	978
1981	669	163	140	39	1,011
1980	695	166	140	38	1,039
1979	713	169	140	35	1,057
1978	733	171	140	36	1,080
1977	753	170	140	35	1,098
1976	774	169	140	34	1,117
1975	790	168	140	33	1,131

*Excludes E.O. Smith; Gilbert, Norwich Free, and Woodstock Academies and alternative high schools.

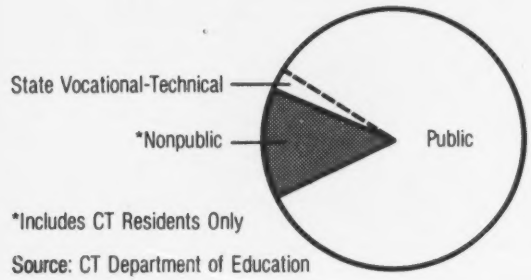
Source: CT Department of Education

Enrollment In CT Public Schools



*Includes State Vocational-Technical Schools
Source: CT Department of Education

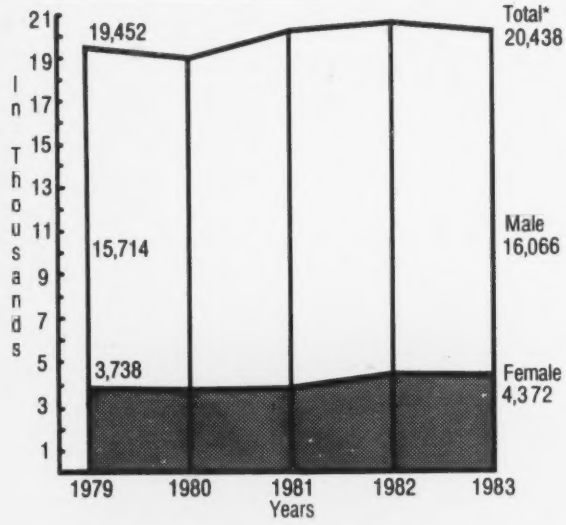
Connecticut's School Population 1983
Total: 571,893



*Includes CT Residents Only

Source: CT Department of Education

Vocational-Technical School Fall Enrollment



*Includes all day, evening, full-time, part-time and apprentice students.

Source: CT Department of Education

Vocational-Technical School Enrollments
As of October 1
Secondary Full-Time Day Program

	1980*	1981	1982	1983	Percent Change 1980-1983
Total	11,996	12,276	12,324	12,408	+ 3.4
Minority	1,693	1,776	2,045	2,196	+29.7
Handicapped	705	813	989	1,070	+51.8

*Figures for minority and handicapped enrollments in earlier years are not available.

Source: CT Department of Education

French, 52,987; Polish, 39,722; and German, 17,860. To sum up these figures, 14.3 percent of those over five years old speak a language other than English at home—or about one out of every seven people in the state.

Languages Spoken at Home

	Age 5-17	Age 18 and over
English Only	568,778	1,935,152
Spanish	35,027	67,823
Italian	8,948	82,320
French	6,801	52,987
Polish	2,583	39,722
German	2,353	17,860

Source: U.S. Census of Population: 1980

Connecticut's Schools

The number of public schools (elementary, middle/junior high, senior high, and alternative or special education schools) in the state has dropped from 1,131 in 1975 to 938 in 1984. Most school closings have been elementary. The closing of schools is just beginning to affect the upper grades. The number of middle/junior high schools started to decline in 1979 and the number of high schools did so in 1982. In addition to the high schools closed (New Britain—1982, Milford—1983, and Middletown—1984), Stamford converted a comprehensive high school into a multi-purpose facility in 1983 and East Hartford has announced it will close one of its high schools in 1985.

There are, in 1984, 386 nonpublic schools, of which 197 are Catholic, 51 are other religious schools, 84 are independent, and 54 are special education schools.

The state operates 17 regional vocational-technical high schools and four satellites. The State Board of Education is the governing board for the schools which offer full-time secondary programs and part-time programs in which many adults enroll.

Applications to the regional vocational-technical schools rose steadily from 1979 until 1982, then dropped in 1983 to 6,650 applicants for the full-time ninth grade exploratory program. The acceptance rate for that year—63 percent—is the highest ever. The increased rate of acceptance, however, is not reflected at all schools. Some accept almost all who apply while at others the demand still far exceeds the spaces available.

Of the total applicants in 1983, there were 2,017 women and 1,567 minorities. These figures represent an increase over 1979 of 24 percent for female applicants and a 31 percent increase in minorities.

Student Population

Enrollment in Connecticut's public and private schools declined from 752,649 in the fall of 1973 to 571,797 in the fall of 1983. Public school enrollment in K-12 and high school postgraduate students declined in 1983 to 491,505 from a high of 675,949 in 1971. Over the years, the average daily attendance has not varied greatly. In 1983-84 it was 93.3 percent. The figures are based on attendance figures from two days each year, in October and May. As might be expected, the state's five largest cities reported an average daily attendance lower than that of the entire state—88 percent in 1982-83.

Enrollment is projected by the Connecticut State Department of Education to continue its decline to 450,102 in 1989, and then to start to increase until it reaches 483,497 in the year 2000, still a lower figure than at present. With the smaller number of students, it should be possible to concentrate on the quality of teachers and teaching given the students, which definitely seems to be the public's expectation.

The decline in K-12 enrollments in Connecticut is projected to be longer and deeper than the national decline projected by the National Center for Educational Statistics. Enrollment in both Connecticut and the nation peaked in 1971. While Connecticut's decline is projected to last through 1989, that in the nation is expected to last through 1984. The decline nationwide is projected to total 15.3 percent, while that in Connecticut is expected to total 21.3 percent.

Connecticut has three statutes governing the hours of instructional time. Public schools must offer 180 days a year with a minimum of 900 hours of instruction annually in days no less than four or greater than six hours. On the average, schools provide 951 hours of instruction annually for elementary school children, 947 hours per year in middle or junior high school and 943 hours in high school.

Enrollment in Connecticut Public Schools

School Year	K-5	6-8	9-12*	Nongraded	Total
			Actual		
1974	290,756	155,324	200,179	14,512	660,771
1979	231,873	128,194	187,722	21,372	569,161
1984	197,152	105,058	157,091	22,053	481,411
			Projected		
1989	216,476	92,620	122,074	18,932	450,102
1994	229,703	103,306	122,966	18,932	474,907
1999	222,340	109,251	135,183	18,932	485,706

*Includes State Vocational-Technical Schools

Source: CT Department of Education

Instructional Time, 1984-85

Hours Per Year	Elementary	Inter-mediate	Middle/ Junior High	High School
Below 900	1	1	0	0
900- 929	59	24	46	48
930- 959	47	17	48	47
960- 989	23	16	26	15
990-1019	15	5	7	8
1020-1049	9	3	6	1
1050 and Above	4	1	1	1
TOTAL	158	67	134	120

Source: CT Department of Education

Fall Enrollment: Public and Nonpublic Schools

School Year	Public[1] Number	%	Vocational-Technical[2] Number	%	Nonpublic[3] Number	%	Total
1983	477,806	83.6	13,603	2.4	80,388	14.1	571,797
1982	492,470	83.9	13,605	2.3	81,196	13.8	587,271
1981	512,159	84.4	13,472	2.2	81,498	13.4	607,129
1980	535,701	85.1	13,125	2.1	80,315	12.8	629,141
1979	556,634	85.8	12,527	1.9	79,893	12.3	649,054
1978	581,171	86.2	12,511	1.9	80,171	11.9	673,853
1977	603,925	86.7	12,464	1.8	80,403	11.5	696,792
1976	623,177	86.9	11,823	1.6	82,195	11.5	717,195
1975	640,879	87.2	11,570	1.6	82,552	11.2	735,001
1974	649,772	87.3	11,017	1.5	83,205	11.2	744,034
1973	656,645	87.4	10,443	1.4	85,561	11.4	752,649

[1]Includes E.O. Smith, three endowed and incorporated academies, the Department of Children and Youth Services, the Department of Mental Retardation, and the Department of Corrections
[2]Includes long-term adults enrolled in secondary day programs
[3]Residents of Connecticut only. Enrollments in 1973 and 1974 are estimates.

Source: CT Department of Education

The school day ranges from five to nearly six hours for elementary through high school. Half-day kindergarten programs range from two to four hours and kindergartens designated as all-day range from three-and-a-quarter hours to five-and-three-quarter hours daily.

The average number of credits required for high school graduation increased from 18.95 for the class of 1980 to 19.51 for the class of 1984, and many districts have already set or are in the process of setting graduation requirements for the class of 1988 that will average 20.88 credits. Legislation adopted in 1984 requires that, beginning with the class of 1988, graduates must have 20 credits, including four in English, three in mathematics, three in social studies, two in science, one in arts or vocational education, and one in physical education.

Requiring credits in specific subjects is new in Connecticut. The new requirements affected every district in the state. Only four districts already met the new standard of three credits in mathematics and only 36 districts required three credits in social studies. In science, 72 districts already required two credits but three districts had no science requirement at all. Sixty-two districts increased the total credits required.

High School Graduation
Average Credits Required by Local School Boards

Subject	Average Credits Required 1980	1984	1988
Arts	0.03	0.05	0.23
Arts or Vocational Education	0.02	0.05	0.67
English	3.97	3.97	4.00
Mathematics	1.64	1.80	2.95
Physical Education	1.28	1.31	1.34
Science	1.48	1.60	2.18
Social Studies	2.17	2.24	2.97
Vocational Education	0.02	0.13	0.14
Electives and Other	8.34	8.36	6.40
TOTAL	18.95	19.51	20.88

Source: CT Department of Education

In the six subjects for which data for the mean number of years of study are available—English, biological sciences, foreign languages, mathematics, physical sciences and social studies—Connecticut college-bound students take fewer courses than students nationally in only one subject area, social studies. The mean number of years students study English has changed little since 1973; Connecticut students, averaging slightly more than four years of English, consistently exceed the national mean.

The mean years of study by Connecticut students have increased since 1973-74 in mathematics, physical sciences, and social studies, and declined in foreign languages and biological sciences. In mathematics, a subject in which the mean years of study of females continues to lag behind males, the difference has narrowed over the past ten years. In foreign languages, however, women take more courses than men. The mean years of study of foreign languages by Connecticut students, while below the average ten years ago, is greater than reported five years ago and is still approximately a half year above the national mean.

In interpreting the mean years in the table, .25 is equivalent to half a semester and .50 equivalent to a full semester or a half year.

Mean Years of Study, By Subject, of Connecticut College-Bound Seniors

Course		1973-74	1983-84
English	Males	4.01	4.01
	Females	4.03	4.06
Mathematics	Males	3.66	3.86
	Females	3.30	3.64
Foreign Languages	Males	2.69	2.50
	Females	3.06	2.90
Biological Sciences	Males	1.45	1.39
	Females	1.53	1.46
Physical Sciences	Males	1.77	2.08
	Females	1.35	1.72
Social Studies	Males	3.04	3.11
	Females	2.87	2.97

Source: The College Board

In 1984 nearly 63 percent of eligible Connecticut students (i.e., high school seniors) took the Standard Achievement Tests (SAT). This figure places Connecticut as the number one state in the nation in percentage of students taking these tests. The state's average SAT score of 904, an improvement over 1982's 896, ranked the state as 4th in the nation in SAT results.

Goals of College-Bound Seniors

Degree-Level Goal	Sex	Percentage of Students 1973-74	1978-79	1983-84
Two-Year Training Program	Male	5.0	4.4	4.5
	Female	8.0	4.3	3.1
Associate in Arts	Male	1.0	1.8	2.0
	Female	4.0	5.3	4.3
B.A. or B.S. Degree	Male	25.0	32.4	33.7
	Female	30.0	33.6	34.7
M.A. or M.S. Degree	Male	20.0	24.8	27.2
	Female	21.0	21.9	24.8
M.D., Ph.D, Other Professional Degree	Male	20.0	14.4	14.2
	Female	11.0	11.2	13.4
Undecided	Male	29.0	22.2	18.4
	Female	27.0	23.7	19.7

Source: The College Board

At the beginning of Section 3 ("Programs") we will go into detail about Connecticut's kindergarten and preschool training programs. But with the rising birth rate in both Connecticut and the nation (in Connecticut from a low in 1976 of 11.5 per 1,000 population is 12.4 in 1980, and in the nation from 1977 of 9.9 per 1,000 to 16.0 in 1982) and the increasing public awareness of the value of preschool education, it is easy to see the importance of this area.

Special education students in the public school population increased from 9.26 percent of the students in 1977-78 to 13.36 percent in 1983-84. Primarily these students have vision, hearing, speech, neurological and orthopedic impairments, or are mentally retarded or learning disabled. The figures above do not include special education for gifted and talented or pregnant students, both of which are dealt with in the following paragraphs.

Special Education Students

	Percent of All Students	
Primary Impairment	**1978-79**	**1983-84**
Hearing Impairment	0.14	0.19
Learning Disabled	3.89	5.97
Mentally Retarded	1.38	1.07
Neurological Impairment	0.10	0.13
Orthopedic Impairment	0.10	0.07
Social/Emotional Maladjustment	1.76	2.60
Speech Impairment	2.46	2.59
Vision Impairment	0.05	0.10
Other Health Impairment	0.07	0.06
Other	—	0.17
Uncategorized	0.24	0.41
TOTAL	10.19	13.36

Source: CT Department of Education

Overall, exceptional students—those requiring some form of special education—comprise 15 percent of Connecticut students. With statistics showing a definite increase in the number of such pupils and recent federal legislation requiring schools to provide education for these children, it is clearly essential to provide more teachers prepared to work with these pupils.

The problem of education for pregnant teenagers in Connecticut public schools has not yet been solved; in fact, no feasible solution has been agreed upon. But the fact that, according to the Connecticut Department of Health Services, one of every 25 babies in the state has a teenage mother, and in 1980 there were 1,572 Connecticut babies born to mothers under 18 indicates that this is definitely a matter to be dealt with. Furthermore the fact that the proposed legislation concerning the education or work-training of pregnant teenagers will probably be presented to the 1985 General Assembly indicates that this is a problem to be resolved soon.

Gifted and talented students are receiving increasing attention as improved identification shows them to be an increasing percentage of the total enrollment. In 1977-78, they were identified as 0.63 percent of the enrollment; in 1983-84, they were identified as 2.1 percent. In 1983-84 there were 135 school districts of the 165 in the state with programs for them, a figure up sharply from the 1973-74 programs in only 31 districts. But, at the same time, it is worth noting that no school district in the state has a program for academically gifted or artistically talented students that runs from kindergarten through grade 12. Most programs are clustered in grades 4, 5, and 6.

The number of students in state-funded bilingual education programs is down to 9,795 in 1983 from 10,405 in 1977. The number eligible for bilingual programs hit a high point of 11,642 in 1978. The future of bilingual education should, of course, be tied to statistics already given concerning school-age children from homes in which a foreign language is spoken. An estimated one in seven may need this help.

An unusual aspect of minority enrollments in the public schools is that, although they are up overall from 89,305 in the fall of 1973 to 98,542 in the fall of 1983, the black segment of this enrollment has declined consistently over the past nine years, from 62,926 in 1975 to 56,447 in 1983. Hispanic and other minority enrollment has increased, from 32,043 in 1975 to 42,095 in 1983, a sufficient increase to produce an overall growth in minority enrollments.

Minority Enrollment in the Public Schools

Fall	Minority Enrollment	Pct. of State Enrollment	Black	Hispanic	Other Minority[1]
1983	98,542	20.3	56,447	34,897	7,198
1982	97,301	19.5	56,468	33,815	7,018
1981	97,208	18.8	57,903	32,789	6,516
1980	97,438	18.0	59,167	32,443	5,828
1979	96,467	17.2	60,149	31,277	5,041
1978	96,467	16.5	61,207	30,446	4,814
1977	96,657	15.9	62,407	29,899	4,351
1976	95,338	15.1	62,619	28,882	3,837
1975	94,969	14.7	62,926	28,671	3,372
1974	92,083	14.1	62,352	26,911	2,820
1973	89,305	13.5	62,018	24,696	2,591

[1]Other Minority includes American Indians and Asian Americans

Source: CT Department of Education

At the same time, the concentration of minority students in large cities has consistently declined, from 63,891 in 1975 to 60,982 in 1983. But in medium size cities, suburbs, and rural areas it is up over this same time span—not dramatically, but still consistently. In rural areas, for example, it is up from 955 in 1975 to 1,483 in 1983, and in the suburbs from 2,339 in 1975 to 2,814 in 1983.

The figures concerning minority enrollments combined with those concerning the home location of minority students may be significant. Since blacks make up by far the largest proportion of minorities (7.0 percent of the population compared with 4.0 percent of Spanish origin,

the next largest segment according to the 1980 census), does this mean that the past is repeating itself — that the process of upward mobility is gradually moving blacks out of the inner city and into the suburbs and small towns, and out of the public schools and into private schools?

The figures given above concerning the locations in which blacks live show this process at work. Figures for black enrollment in Catholic parochial elementary schools (the largest segment of private schools) in the three Connecticut dioceses show there is an upward trend in numbers of blacks attending private schools (in the Bridgeport diocese from 787 black students in 1982-83 to 824 in 1984-85; Hartford, from 1,837 in 1982 to 1,861 in 1984-85; Norwich, from 99 in 1982-83 to 113 in 1984-85).

Overall enrollment in adult education programs has been following a downward trend similar to elementary and secondary enrollment, with some notable exceptions in specific courses. Total enrollment in all programs, mandated and nonmandated, has declined 14 percent from 140,712 in 1978-79 to 121,042 in 1983-84. However, enrollment in mandated courses—which include basic skills and high school completion as well as classes in English and American citizenship—has increased to 41,064 in 1983-84, a five percent gain over the preceding year although still well below the level of five years ago. Minorities account for approximately 23,000 of the current enrollment in mandated courses, an increase in minority enrollment of 82 percent since 1978-79.

In nonmandated programs offered by the public schools, enrollments have increased in business and commercial/vocational courses and in health and safety, while decreasing in home economics, crafts, recreation and sports, and noncredit academic courses.

Connecticut's Teachers

Bright spots in the picture of Connecticut's teachers and teaching are the improving ratio of teachers to students and the rising level of education of Connecticut's teachers. In the 165 public school districts in Connecticut in 1983, there were 35,916 full-time certified professionals. Of this number 11,280 were full-time teachers in the general elementary area; 13,837 in subject areas; 3,462 in special education; 2,591 in vocational education; 2,468 in support staff (counselors, psychological examiners, school psychologists, social workers, and reading consultants), and 2,278 administrators. All areas had fewer staff members than the year before, except special education, which increased by ten.

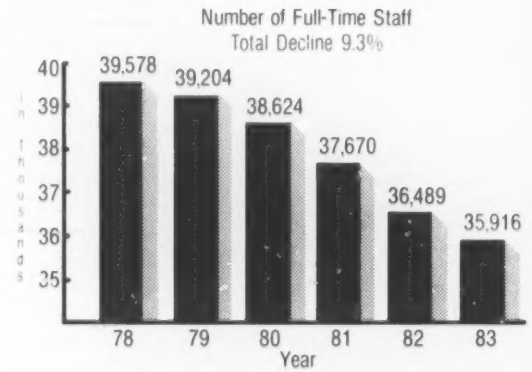
Because the number of students has declined, but the need for adequate school staffing has not lessened in proportion, the positive result is that the number of teachers per 1000 students has increased. This teacher-student ratio is one of the most important factors in quality education, and Connecticut's ratio is third best in the nation, after Alaska and Vermont.

From 1978 to 1983, the number of teachers per 1000 students rose from 61.5 to 67.2, equivalent to an improvement in the student:teacher ratio of 16.3:1 to 14.8:1. The ratio of support staff (counselors, psychologists, social workers, reading consultants, etc.) per 1000 students also improved during this time. The number per 1000 students increased from 4.8 to 5.4.

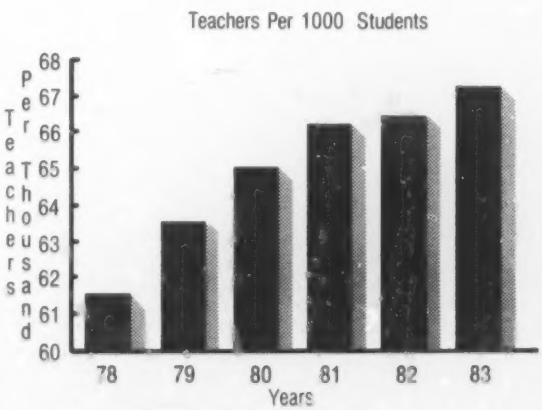
Full-Time Teachers and Support Staff

	1978	1983	% Change
Number	39,578	35,916	- 9.3
Mean Age	38.4	41.4	+ 7.8
Mean Salary	$15,481	$22,977	+48.4
Mean Years CT Experience	10.1	13.1	+ 29.7

Source: CT Department of Education



Source: CT Department of Education



Source: CT Department of Education

At the same time, during the past years the education level of Connecticut teachers has risen steadily, partly because local school districts are hiring fewer new teachers. In 1976, 58.2 percent of the teachers and their support staff had degrees beyond the bachelor's. In 1979, this figure had risen to 67.1 percent. In 1983, the figure was 73.4 percent.

Education Level of Full-Time Teachers and Support Staff

Year	Percent of Staff: 6th Year or Doctorate	Bachelor's Plus 30 Hours or Master's	Bachelor's or Less
1983	20.5	63.4	16.1
1982	19.4	63.0	17.7
1981	18.2	62.2	19.7
1980	17.2	61.6	21.3
1979	16.8	60.4	22.8
1978	15.0	60.2	24.8
1977	12.9	59.6	27.6
1976	12.0	55.4	32.8

Source: CT Department of Education

But statistics on other aspects of teachers and teaching in the state show a situation with much room for improvement. Recognizing this fact, Commissioner Gerald N. Tirozzi and the State Board of Education have directed the greatest number of their recommendations in *Connecticut's Challenge* to the matter of improving teaching and have placed this first on their agenda for educational equity and excellence.

How Teachers Are Paid

The figures concerning teachers' salaries, the number of students graduating with degrees in education, the plans of high school students who are going to college, and the quality of students in educational courses are all revealing.

Median starting salaries of teachers with bachelor's degrees have increased less than $5,000 from 1976-77 to 1984-85 (from $8,770 to $13,650) — and this at a time when, in other fields, starting salaries of $20,000 for those with bachelor's degrees are not uncommon. The mean salaries of full-time teachers and their support staffs increased from $13,794 in 1976 to $24,960 in 1984 — again at a time when salaries of $35,000 to $40,000 are not at all uncommon for people with a similar amount of education. And, worth pointing out, is the fact that teachers at the mean salary level in 1984 had an average of 13 years' experience.

The mean salary for a beginning teacher in Connecticut in 1984-85 of $13,650 (or $17,669 if adjusted to a 12-month equivalency) becomes even more significant when this is compared with first step, entry-level salaries paid certain state employees: librarians, about $18,000; state policemen, about $18,300; social workers, about $19,150; clinical nurses, about $19,900, and accountants, about $22,100.

A revealing set of statistics concerning teachers' salaries comes from a comparison of salaries for teachers with the Consumer Price Index. From 1976 to 1984 the CPI rose 80 percent; during this same time the median starting salary for full-time teachers rose only 55.6 percent. Today's median starting salary adjusted for inflation is $2,330 below the 1976-77 median starting salary.

If the mean salary of a full-time teacher, which is $24,960 in 1984, is adjusted by the Consumer Price In-

Connecticut Experience of Full-Time Teachers and Support Staff

Year	Less Than One Year: Number	Less Than One Year: Percent	25 Years or More: Number	25 Years or More: Percent	Mean No. Years
1983	930	2.8	3,218	9.6	13.1
1982	873	2.6	2,985	8.7	12.6
1981	1,190	3.4	2,761	7.8	11.8
1980	1,475	4.1	2,625	7.2	11.3
1979	1,840	5.0	2,453	6.6	10.7
1978	2,032	5.4	2,181	5.8	10.0

Source: CT Department of Education

Age of Full-Time Teachers and Support Staff

Age	1976 %	1977 %	1978 %	1979 %	1980 %	1981 %	1982 %	1983 %
Over 60	3.5	2.6	2.7	2.7	2.8	3.0	3.1	3.3
56-60	5.2	5.4	5.5	5.7	6.0	6.2	6.6	7.1
51-55	7.3	7.9	8.4	8.8	9.2	9.9	10.6	10.9
Mean Age:	37.6	38.0	38.4	38.9	39.5	40.1	40.8	41.4

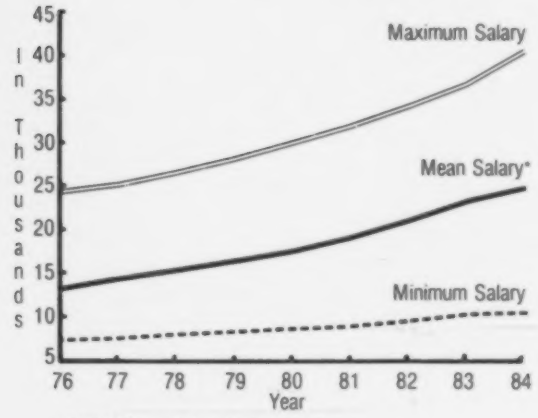
Source: CT Department of Education

Starting Salaries of Teachers With a Bachelor's Degree

Year	Low	Median	High
1984-85	$10,819	$13,650	$17,795
1983-84	$10,150	$12,376	$16,400
1982-83	$ 9,650	$11,515	$14,570
1981-82	$ 8,917	$10,770	$13,370
1980-81	$ 8,466	$10,155	$12,653
1979-80	$ 8,097	$ 9,675	$11,937
1978-79	$ 7,900	$ 9,250	$11,350
1977-78	$ 7,700	$ 8,950	$11,070
1976-77	$ 7,400	$ 8,770	$10,826

Source: Connecticut Education Association
Connecticut Department of Education

Salaries of Full-Time Teachers and Support Staff



*1984 Mean Salary is Estimated

Source: CT Department of Education

Salary of Full-Time Teachers and Support Staff

Year	Mean Salary	Minimum Salary	Maximum Salary
1984	$24,960*	$10,819	$40,246
1983	$22,977	$10,250	$36,691
1982	$21,036	$ 9,650	$34,269
1981	$19,121	$ 8,917	$32,042
1980	$17,624	$ 8,466	$30,020
1979	$16,454	$ 8,097	$28,199
1978	$15,482	$ 7,900	$26,511
1977	$14,714	$ 7,700	$24,945
1976	$13,794	$ 7,400	$24,401

*Estimated

Sources: Connecticut Department of Education
Connecticut Education Association

dex, that teacher would be earning $13,583 in 1976 dollars. In purchasing power, the average teacher's salary has not even kept pace with inflation, much less advanced.

An additional fact that makes this matter of teachers' salaries so sensitive is that teachers perceive themselves as being grossly underpaid, as is shown by the Gallup Poll published in the October, 1984 issue of the *Phi Delta Kappan*.

The number of bachelor's degrees awarded by Connecticut colleges of education is down from 2,829 in 1973-74 to 835 in 1983-84. The figure will not be rising in the near future if graduating high school seniors follow their plans. The number of Connecticut students who reportedly plan to do their college work in education is down sharply—from 8.0 percent of those taking the SAT exams in 1974 to 4.0 percent in 1984. And it should be kept in mind that, with the declining number of high school students, a larger percentage of students must be attracted to teaching just to maintain the number of students intending to be teachers.

In the past ten years there was a 50.5 percent drop in the estimated number of female college-bound seniors who indicated they intended to study education in college and a 66.3 percent drop in the number of males. The percentage of females intending to enter education increased from 6.3 last year to 6.8 percent in 1984, but this was still well below the 13.0 percent citing this area of study 10 years ago. The percentage of males citing this area continued to fall, going from 4.0 percent in 1974 to 1.7 percent in 1984.

The Teachers' Retirement Board reports that teachers are retiring earlier and in larger numbers than previously (685 retirees in 1983-84 as compared with only 534 in 1975-76 and 594 in 1980-81). There is an apparent contradiction here, because the Department also reports that the mean age of teachers has risen from 37.6 in 1976 to 41.4 in 1983. The answer to this lies in the fact that when teaching staffs are cut back, the youngest teachers with the least seniority are the first to go, and not as many young, starting teachers are hired to replace retirees. (This, incidentally, is also one reason why teachers' mean salaries have jumped so sharply in recent years.)

Another discouraging set of statistics concerns the reasons given for withdrawals from the teachers' retirement system. In 1976-77 fewer than ten percent of those withdrawing before retirement gave as their reason "entering another field of work." By 1981-82 this figure had risen to a substantial 605. Since then it has declined to 246 in 1983-84, but this decline might reasonably be ascribed to economic conditions in "other fields" rather than to the holding power of education.

Here, incidentally, may be a good place to point out that the number of threats and assaults on Connecticut teachers, administrators, and students is down, from a high of 1,218 in 1979-80 to only 402 in 1983-84. Furthermore, teachers no longer give the possibility of assaults as a leading reason for leaving the profession.

Threats and Assaults

	1979-80	1980-81	1981-82	1982-83	1983-84
Assaults	379	354	272	289	165
Administrator	33	24	19	22	14
Teacher	235	227	193	186	101
Student	67	67	36	53	27
Other	44	36	24	28	23
Threats	839	592	393	348	237
Administrator	118	81	63	47	45
Teacher	659	463	293	275	177
Other	62	48	37	26	15

Source: CT Department of Education

Supply Lagging Demand

All the ingredients for a teacher shortage are present. More retirees can be anticipated as the teaching population ages. Starting and midcareer salaries continue to lag behind those of other occupations requiring similar training. There has been a decline in both the number of graduates from Connecticut's schools of education and in the percentage of high school students intending to study education.

The graphs depicting the number of retirees and/or withdrawals from the Teachers' Retirement System and the college-bound seniors intending to study to become teachers set the stage. If the two trends—fewer entrants into the profession and more leaving—continue unabated, the teacher shortage will become critical.

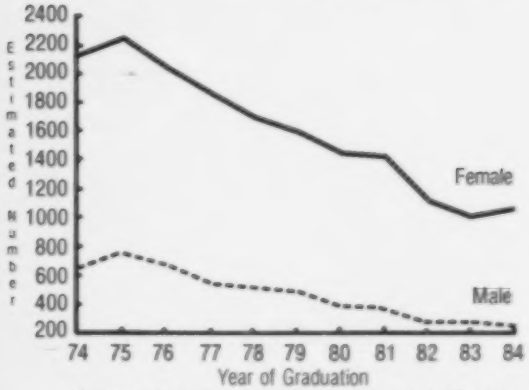
Actions are being taken to head off any such crisis. A teacher incentive loan program, adopted by the General Assembly in 1984, will provide undergraduate students, who are preparing to teach, loans for $5,000 per year, with 20 percent of the loan to be forgiven each year that a recipient serves as a certified teacher in a Connecticut public school in an area of teacher shortage. A substantial increase in teachers' salaries, espoused by the commissioner of education, the Connecticut Education Association, and others as key to the schools' ability to recruit and retain good teachers, is under consideration by the Governor's Commission on Equity and Excellence in Education, which will make recommendations to Governor William A. O'Neill in June 1985.

Teacher Incentive Loan Recipients

Shortage Area	Spring 1984	1984-85
Chemistry	5	12
Industrial Arts	3	10
Mathematics	22	51
Physics	7	8
Speech and Hearing	12	19
TOTAL	49	100

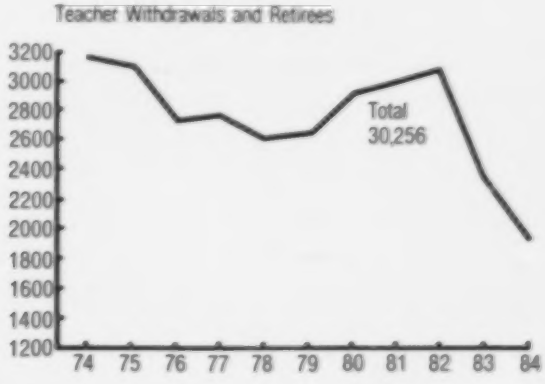
Source: CT Department of Higher Education

College-Bound Seniors Intending to Study Education

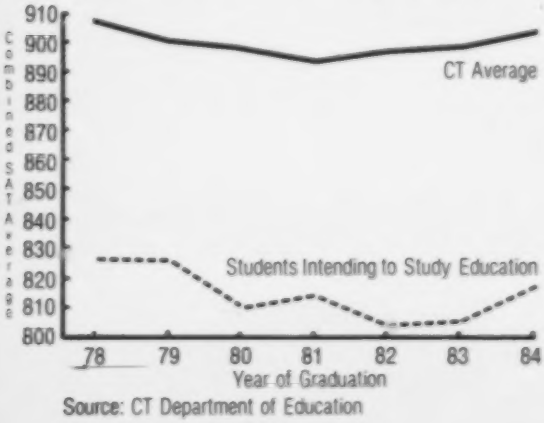


Source: The College Board/CT Department of Education

Teachers Leaving vs Students Intending to Enter the Education Field

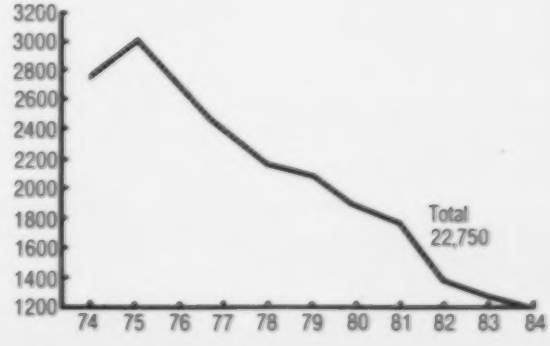


Average SAT Scores of Students Intending to Study Education



Source: CT Department of Education

High School Seniors Intending to Study Education



Source: CT Department of Education

Perhaps most discouraging is the fact that the average combined SAT score of those intending to study education in college was 825, as compared with a statewide average score of 907. By 1983-84 this gap had even widened. The average combined SAT of those intending to study education had dropped eight points to 817, while the statewide average had dropped only three points to 904, in the state which ranks first in percentage of students taking these tests. This clearly indicates that at present our future teachers may be coming from the bottom half of the barrel—not from the top where Connecticut aims to get them in the future.

These are the vital statistics profiling Connecticut today, its people and its schools. The data tell also how our population and our schools have evolved and give us many clues about what lies ahead, the characteristics of the citizens whom our schools must serve and what sort of educational programs will be needed to satisfy our goals of equity and excellence.

Connecticut's public schools, on the record, are good. But good is never enough. Even if the goals for the schools were fixed and unchanging, there would always be room for improvement. Equity and excellence, however, are moving targets, defined at any point in time by the characteristics of the population the schools must serve, the demands of the workplace in which graduates will live and work, and the aspirations of the society to which the schools belong.

Public Opinion

		Percent
In four samplings of public opinion made by the Connecticut Education Association between the summer 1982 and winter 1984, the public rated the job being done in their community school as:	Excellent	18.0
	Good	41.1
	Fair	26.6
	Poor	14.3
In samplings made in 1983 and 1984 replies were as follows:		
In general, would you say the teachers in your local public schools are	Better Than Average	27.3
	About Average	65.5
	Worse Than Average	7.2
	Paid Too Much	7.8
	Paid About Right	38.6
	Paid Too Little	53.6

In "The 16th Annual Gallup Poll of the Public's Attitude Toward the Public Schools," published in the September 1984 issue of *Phi Delta Kappan*, Dr. George Gallup reported:

> "The downward trend in the public's rating of the public schools recorded in these surveys during the last decade has ended. This year 42 percent of those interviewed gave an 'A' or 'B' rating to the public schools in their communities, up sharply from 31 percent in 1983. Not since 1976 have these ratings been so high."

Meeting *The Challenge*

The basic challenge is change. The continuing need to serve new population mixes and to meet evolving social and economic needs give education its dynamic nature.

Whatever the demography, the social trends or the state of the economy, the schools must provide an environment in which all children can learn and to which all adults can return to continue learning throughout a lifetime. This means not only serving present students and their current needs; it also means anticipating emerging technologies and occupations to prepare today's students for tomorrow's world and readying today's schools to serve the new wave of students that will arrive in the coming years. A deciding factor will be Connecticut's ability to attract bright young people to the teaching profession, to prepare them adequately, to retain the most competent and foster their continuing professional development throughout their careers as classroom teachers and mentors of students.

The challenge is formidable but the State Board of Education and the Commissioner of Education are committed to putting the efforts and resources into the programs that will meet the needs of the state's citizens at all times. Educational initiatives that respond directly to the demographic realities were put forth in *Connecticut's Challenge*. They are being implemented daily by staff of the Department, by local school districts, by advisory and study committees to the Board, and by the Board itself. Among the activities to strengthen the schools and bring educational programs into closer alignment with the needs of Connecticut's people are the following:

- **An earlier and better start for young learners.** Although the General Assembly in 1984 did not lower the age of compulsory school attendance from seven to five years and did not mandate that school districts offer all-day kindergarten for those whose parents opt for it—both actions advocated by the State Board of Education—the Department continues to work toward giving all children opportunities for early learning experiences. The child's capacity for learning is unequaled later in life; it must be fostered in the early years, especially among those families that are economically least able to send their children to a private day-care center.

  Seventeen local school districts now offer extended-day kindergarten programs. According to a State Department of Education survey, eight other school districts are formally considering instituting all-day kindergarten and approximately 40 others are studying its feasibility. Acting on a Department of Education initiative, a committee is working on a guide to kindergarten curriculum development. Like the series of guides to curriculum development in each of the 11

mandated subject areas, published by the State Board of Education in 1981 and 1982, the kindergarten guide will present an array of options and help each district develop the program that best meets its needs for early childhood education.

These extra hours at school are particularly important for the children whose home environment does not foster development of their inherent abilities and for whom school must play a compensating role. For children who have already attended full-day nursery school, all-day kindergarten is the logical next step in the transition from home to school. When all-day kindergarten is offered on a voluntary basis, the majority of parents enroll their children.

Two study committees have been debating the best ways for Connecticut to provide learning experiences that will develop the potential of the state's youngest citizens. The committee scrutinizing Four-Year-Olds, Their Families and the Public Schools will report its findings and recommendations in April 1985. Preliminary findings from the committee indicate that there are approximately 44,000 children in licensed day care and group care homes. This figure does not include unlicensed child care and care by family members. Of the 44,000, about 25 percent of all four-year-olds in Connecticut (based on birth statistics) are in care outside the home.

Of the four-year-olds in care in 1983, 61.4 percent are in licensed day care centers; 16 percent in licensed family day care homes; seven percent in a Head Start program; five percent in public and 3.8 percent in private school programs.

The Birth-To-Three Study Committee, established as one of the initiatives in *Connecticut's Challenge* to study whether services for handicapped infants and toddlers should be mandated, reported its finding and conclusions to the State Board of Education in December 1984. The committee found that research on the efficacy of early intervention with handicapped or at-risk children documents the importance of early intervention for children, birth to five years, and their families, particularly those of low socioeconomic status. The largest single cause of retardation in children appears to be economic in nature.

Literature on the effect of early intervention with young children who are handicapped or at risk of developing handicaps, indicates that early childhood intervention programs are an effective means of altering their lives by retarding the development of maladaptive behavior and contributing to the normalization of family life. More can be done to help mentally retarded children and it probably can be done more effectively through coordinated efforts of the Department of Education, the Department of Mental Retardation, and other agencies concerned with mentally retarded young people.

Based on its preliminary study, the Birth-To-Three Study Committee concluded that a mandate is needed and that it should be interagency in nature. Specifically, the committee's recommendations which the Board will consider in January are that:

.. the State of Connecticut shall mandate the provision of appropriate programs to children who are handicapped or at risk of developing handicaps;

.. the mandate shall be interagency in scope, delineating roles and responsibilities for several agencies;

.. the mandate shall acknowledge the primary role of the family;

.. the mandate shall define the populations to be served.

The report asked the State Board of Education to authorize continuation of the Birth-To-Three Study Committee and to carry out its proposed action plan, beginning with a meeting of state agencies involved in services to young children and culminating in further recommendations, including a model mandate, by October 1986.

- **Recruiting and retaining excellent teachers.** Teaching as a profession has lost its appeal. The best and brightest young people are not choosing to become teachers, and experienced teachers, the data shows, are moving to other fields or retiring early. In 1980, 1,870 college-bound seniors indicated their intent to study education. In 1984, however, only 835 graduates of education programs received B.A. degrees from Connecticut colleges and universities. In that same year, 1,931 teachers in the public schools retired or withdrew from their positions. In the previous year, the gap was even larger, with 849 persons graduating from education programs and 2,349 leaving their teaching positions. While larger numbers received M.A. degrees, it can reasonably be assumed that most of them were teachers getting advanced degrees rather than newcomers to the teaching profession.

Number of Graduates in Education Programs From Connecticut Colleges and Universities

Year	B.A.	M.A.
1983-84	835	1,656
1982-83	849	1,772
1981-82	1,070	1,973
1980-81	1,209	2,401
1979-80	1,292	2,325
1978-79	1,415	2,688
1977-78	1,764	2,869
1976-77	2,072	3,191
1975-76	2,314	3,337
1974-75	2,562	3,026
1973-74	2,829	3,011

Source: CT Department of Higher Education

Teacher shortages have developed in a number of fields and often classroom teachers are underprepared for classroom management, for using technology as a learning tool or for dealing with students with special learning needs. To reverse these trends will require major upgrading in the salary scale for teachers, in the content and rigor of teacher preparation, and in the resources and opportunities which schools provide for continuing professional development of staff members. The calendar of activities related to these requirements is a full one.

The Governor's Commission on Equity and Excellence in Education has been meeting regularly since August 1984 to examine teacher salaries and the demands of the education profession in relation to other professions and to the state's resources. The Commission will make its full report in June 1985. In its interim report in December 1984 the Commission adopted the following positions:

.. That significant increases in teacher compensation will be necessary to restore the professional image of teaching and attract candidates of the appropriate calibre;

.. That the Commission will study the ramifications of implementing a minimum salary of at least $18,000 for teachers; (Amounts suggested previously by the Commissioner of Education and by the Connecticut Education Association were, respectively, $20,000 and $24,000 minimum.)

.. That the Commission supports the Board of Education's recommendation to the General Assembly that the state provide half the funding for the local public schools, and

.. That the Commission endorses the Board of Education's budget request for funds to recognize outstanding educators as Distinguished Teachers and Exemplary Teachers, and for Exemplary Schools and Programs.

The Commission, in its preliminary report, also adopted the concepts that private industry should develop and sponsor programs to recognize teachers and publicize education; that examinations should be administered to prospective teachers to assure that they are adequately prepared; and that the state should expand its professional development programs, such as the Institute for Teaching and Learning, for practicing teachers.

The Committee on the Revision of Procedures and Standards for Connecticut Teacher Preparation Programs, which reported to the Board in 1984, called for adherence to high standards of quality and for more rigid preparation for teachers entering the profession. The committee's recommendations support the concept, advocated by the State Board of Education, of competency examinations for teachers. Standards for evaluating teacher preparation programs offered by 14 colleges and universities in the state include cooperative arrangements with elementary and secondary schools and the demonstration by candidates for teacher certification of the appropriate teaching competencies, including the passing of exit assessments at the conclusion of the training program. Among the competencies listed which teachers must demonstrate are skills in reading, writing and mathematics; up-to-date knowledge of the subject matter to be taught; effective communication with students and an understanding of their needs, and competency in making and implementing instructional plans.

The new standards for teacher preparation programs apply to six areas: administration, faculty, students, curriculum, facilities and resources, including technology, and evaluation. Four major changes designed to strengthen the programs and improve the competency of teachers entering the field are the following:

.. Faculty must keep up-to-date in both the content of subject areas which candidates will teach and in educational methods;

.. Admission standards for students applying to teacher preparation programs are more specific, requiring demonstrated competency in basic skills and at least a B- average;

.. Emphasis in the curriculum will be on balance in both subject content and educational practices;

.. Evaluation, a new component, requires training institutions to follow up on their graduates, find out how well they are doing and change the teacher preparation programs accordingly.

To encourage students to become teachers, a program of Educational Loans to Encourage Excellence in Teaching (ELEET) was instituted this year by the Board of Governors for Higher Education and the State Board of Education. Students intending to teach may borrow up to $12,000 to attend a public college and up to $20,000 if attending a private college. In return, the student pledges to teach after graduation in a Connecticut elementary or secondary school. For each year of teaching, a portion of the loan will be forgiven. At the end of five years of service, the entire loan will be forgiven.

Emphasis on competence is integral to the program. To be eligible, candidates must have combined SAT scores of 1200 or above, or combined SAT scores of 1000 plus a high school rank in the top 20 percent at the end of the junior year, or either of the above plus demonstrated financial need. The required scores far exceed the 1983-84 state average combined SAT score of 904 and the even lower 817 of those intending to study education.

College undergraduates may also qualify on any of the above criteria or by a minimum grade point average of 3.3 after completing 15 semester hours of college credit and demonstrating financial need. Sixty percent of loan recipients are to be selected on merit, with 40 percent chosen on merit plus financial need.

The shortage of teachers in certain subject areas is also being addressed aggressively through another teacher incentive loan program for students attending Connecticut colleges. Students enrolled in a teacher preparation program in any of the five subject areas in which teacher shortages have been identified by the State Board of Education—chemistry, industrial arts, mathematics, physics, speech and hearing—can receive $5,000 a year for two years. The loans will be forgiven at the rate of 20 percent per year over a five-year period provided the recipient is teaching in one of the shortage areas in a Connecticut public school.

- **Quality teaching.** The Certification Advisory Council, in its review of Connecticut's system of teacher certification, found that the current regulations bore only a tenuous relationship to the skills and personal qualities which make for effective teaching. The system is based upon the accumulation of course credits and, after as few as three years, leads to a permanent certificate. Except for student teaching, the certification regulations do not address actual teaching competence or classroom performance, and the permanence of standard certifications provides no incentive for ongoing, or even periodic, growth and renewal.

  The objective of the recommendations for the Certification Advisory Council is to use certification to ensure that teachers have the specific competencies to meet actual needs of learners and that their competencies and teaching skills will be maintained and updated throughout their careers.

  The Board of Education in December 1984 adopted the stricter licensing standards, including a requirement that Connecticut teachers participate in a prescribed amount of professional development during each five-year period in order to retain their licenses. The Board also voted to link the standards with "appropriate increases in teacher salaries." Action on specific amounts was deferred pending the outcome of the report of the Governor's Commission. The Board did, however, endorse a recommendation in the Commission's interim report to study the effects of a minimum starting salary of $18,000 for Connecticut's public school teachers.

  Proposed changes in teacher certification regulations adopted by the Board call for discontinuing both the provisional and standard certificates and instituting a new certification system in their place. Currently, the provisional certificate is granted upon completion of specified coursework and the recommendation from a teacher training program and is valid for ten years. The standard certificate, granted upon completion of three years of teaching and 30 additional semester hours of credit, is valid for the duration of a teacher's career. The committee debated but did not adopt the concept of a master teacher certificate.

  The new law, which must be acted upon by the General Assembly, would establish three levels of certification plus an alternative route.

  .. An initial certificate, to be granted upon (1) completion of specified coursework (2) recommendation of an approved teacher training program, and (3) a passing grade on appropriate examinations. The initial certificate could be renewed once for an additional year of teaching under a beginning teacher program.

  .. A provisional certificate, to be granted upon completion of a beginning teacher program and recommendation of a superintendent. The provisional certificate would be valid for eight years, not renewable, and would require the holder to teach beyond the beginning teacher program.

  .. A professional certificate, upon completion of 30 additional and teaching-related semester hours of credit or a master's degree and at least three years of successful teaching under the provisional certificate. Certificate would be continued at five-year intervals through attestation by the superintendent that the teacher has engaged in professional growth experiences equivalent to nine continuing education units (90 contract hours).

  An alternative route to initial and provisional certification, proposed by the Council, would provide a structured means by which certain course requirements could be waived. Initial and provisional certification would be granted on the basis of specific requirements and standards, the request of a local school district and a two-year beginning teacher program. The Board, however, modified this to require those who use the alternative route to receive some form of teacher training before actually working in a classroom.

As a requirement for admission into teacher training, candidates must pass the Connecticut Competency Examination for Prospective Teachers (CONNCEPT). The requirement, adopted by the State Board of Education in April 1982, calls for testing in basic skills of reading, writing and mathematics. Pilot testing will occur in March 1985 with the first administration of the pretraining test scheduled for October 1985. From that date, the CONNCEPT will be administered twice each year, in spring and fall, and a passing score will be required for admission to a teacher education program in the state. Satisfactory scores will be set by the State Board of Education based on recommendations from a review panel of experts.

Provisional (Initial) Teaching Certificates Issued in 1983

	Graduation 1983		Before 1983		
	In-State	Out-of-State	In-State	Out-of-State	Total
Total Certificates	1355	411	1066	1591	4423
Total People	1198	271	989	1156	3614
Administration	144	17	204	110	475
Art	27	3	25	28	83
Bilingual	0	1	3	9	13
Biology	20	8	23	50	101
Business and Office	13	9	10	31	63
Chemistry and Physics	18	6	29	35	88
Counselor	20	2	32	30	84
Earth and General Science	22	10	27	71	130
English	35	6	45	59	145
Foreign Languages	15	7	34	63	119
Industrial Arts	2	5	11	13	31
Kindergarten, Elementary	359	175	229	442	1205
Library Media	13	1	12	17	43
Mathematics	37	8	27	82	154
Music	56	24	21	54	155
Physical Education	68	14	41	51	174
Psychologist	27	7	15	24	73
Reading Consultant	41	8	46	40	135
Social Sciences	32	13	53	76	174
Social Work	6	3	9	18	36
Special Education	314	64	118	177	673
Speech and Hearing	15	7	8	29	59
Vocational (Other Than Business, Industrial Arts)	19	6	8	26	59
Other	52	7	36	56	151

Source: CT Department of Education

As noted earlier, both the standards and procedures for the approval of teacher preparation programs and the new requirements for an initial teaching certificate call for examinations of professional knowledge and subject matter proficiency. Tests, suitable to all fields of certification, must be selected or developed. Currently, the Teacher Examination Development Panel (TEDP) is researching the most feasible means to validate subject matter proficiency. The evaluation of professional knowledge will be required for teacher certification beginning in the spring of 1987.

- **Continuing Professional Development.** Although there are teacher shortages in certain subject areas, such as mathematics and science, the turnover resulting in new openings is relatively low. In 1982-83, for example, the turnover rate was only 5.9 percent. Most of the teachers who are in the classroom now will be there for some years in the future. They will need to remain current in their fields and in teaching techniques.

  While expenditures for professional development activities have increased in recent years, the average spent by local school districts continues to be less than one percent of their total budgets.

In 1984 the General Assembly passed a public act requiring each school district to develop a five-year plan for ongoing and systematic professional development. This plan must meet the approval of the State Board, which in turn is instructed by the act to help local school districts in developing their plans.

The General Assembly included in the State Department of Education appropriation for 1984-85 an amount of $500,000 for professional development. A newly established Institute for Teaching and Learning offered its first series of programs in the summer of 1984. One- and two-week sessions were held in six locations in the state. There were approximately 3,000 applicants for 600 places. There is a waiting list of registrants for the next summer session, clear evidence of teachers' interest in renewing and improving their competence.

The Board's commitment to professional development extends also to the staff of the State Department of Education, as evidenced by the inclusion in the reorganization plan of a new office staff and organizational development.

In its 1985-86 budget request, the Board of Education asked for $3.6 million in order to greatly expand the work of the Institute. It also requested $200,000 for Institutes for administrators and $500,000 for minigrants to be given individual school districts to help them further their local plans for professional development. One of the reasons the Board recommends that the school year for teachers be extended from 180 to 190 days in 1986-87 is to ensure that time will be available for professional development.

During the 1984-85 school year, the State Department of Education staff is conducting workshops and providing materials for teachers and administrators in 12 locations accessible to teachers in all school districts in the state.

Expenditures for Staff Development

Year	Dollars in Millions	Percent of Total Expenditures
1983-84	13.8	0.9
1982-83	12.7	0.8
1981-82	11.6	0.8
1980-81	12.0	0.9
1979-80	11.6	0.9
1978-79	9.0	0.8
1977-78	8.3	0.8
1976-77	9.0	0.9
1975-76	7.0	0.7
1974-75	7.1	0.8

Source: CT Department of Education

The combination of adequate salaries, strong preparation of teachers entering the professions, mentoring and monitoring beginning teachers' performance, and continuing professional development should do a great deal to restore teaching to its position of respect in the community and to attract and keep the best qualified teaching staff in the nation.

Other aspects of teacher training receiving extra attention are preparation to identify and teach students with special learning needs engendered by handicapping conditions, by limited proficiency in English or those needing extra challenges and motivations because they are gifted and talented.

- **Improving Student Performance.** The Priority School District program, begun as a major initiative in 1984, provides grants and technical assistance to the ten school districts whose students on the basis of statewide proficiency tests were considered to be most in need of assistance to improve their performance. The program is funded at $2 million for 1984-85. The ten participating districts are: Bridgeport, Eastford, Hartford, Killingly, Middletown, New Britain, New Haven, Stamford, Waterbury and Windham.

  Based on their action plans, the ten districts received grants for 1984-85 ranging from $20,000 to $447,000, determined by enrollment, relative wealth and the proposal submitted. In addition to the new state grant, the Department is using other state and federal resources to provide extra services to the priority districts. These efforts include special consideration for discretionary grants, statewide professional development activities and general technical assistance.

  Each district developed a three-year plan with both short- and long-term goals and, following negotiations, received a grant. The action plans provide for activities to improve basic skills; to provide professional development for administrators and teachers, concentrating on more effective classroom instruction in mathematics, reading and language arts; and to improve the school environment. Progress will be evaluated jointly by state and local personnel.

- **Enhanced educational opportunities for adults.** The practical needs of this growing segment of the population are for increased literacy for nearly 500,000 adults age 25 and over who have not completed high school (more than 150,000 of whom have not finished elementary school) and the increasing numbers of adults in midcareer whose skills no longer match the needs of employers. Even more startling, employers find that many who have completed high school still lack the basic skills for entry-level jobs and the work orientation to seek and keep a job. If this is the result of social promotions in the 1970s, there may be a boom in the next five to ten years in the numbers of young people with diplomas who cannot function as productive citizens. Add to these groups the growing number of senior citizens who want to continue learning, at a time when the enrollment of young people is falling, and the need for schools to focus on offering more diverse educational opportunities for adults of all ages becomes obvious.

  They constitute a group of learners which the public schools traditionally have not served except as a fringe activity in adult evening classes. These enrichment courses are no longer enough to satisfy the needs of this market or the demands of the state's businesses for qualified employees whose knowledge and skills keep pace with technology. Closer communication and planning between business and industry and the schools are essential if adult learners are to be equipped with qualifications for the contemporary workplace.
  The Adult Education Study Committee concerned with these issues will report to the State Board of Education in March 1985. One of the issues to be resolved is which of the various institutions of secondary and higher education will provide learning opportunities to meet each of the needs of the different segments of the adult population. At the same time that the adult education constituency is growing and traditional enrollment is declining, the character of the population is changing. In materials prepared for the Adult Education Study Committee, Arthur Andersen & Co. projects that by the year 2,000 Connecticut's minority population will be approximately 25 percent of the total population of the state. The projection is based on the increase in blacks and Hispanics during the 1970s and the makeup of the 1983 kindergarten classes.

  The committee's report will emphasize the need for more adult education than Connecticut schools now offer. The need results from a number of factors, including the growth in service industries, technological changes in manufacturing jobs requiring the retraining of workers, and the projected decline in young people available for employment. The committee will also call for full state funding of these programs both to demonstrate the state's commitment to adult education and to allow the State Board of Education and the State Department of Education to exercise aggressive leadership through planning and policy development.

- **Managing decline in enrollment.** Declining enrollment, particularly evident in the elementary grades, has been a fact of life, nationally and in Connecticut, for 15 years. The decline in the number of students is now moving relentlessly to the junior high and high schools. Since 1975 Connecticut school districts have —reluctantly—closed more than 200 elementary schools. Some middle/junior high schools have been merged with elementary and high schools within the district, but so far, only three high schools have closed. Managing decline at the high school level poses the

toughest challenge because the majority of districts have only one high school and because maintaining a high school for fewer than 400 students often means trimming the breadth of the curriculum offerings, thus depriving students of the diversity and range of programs that constitute equal opportunity and excellence.

The Department's 1984 report on public school enrollment pointed out trends and gave projected enrollments to the year 2000. The Commissioner called for districts to explore ways to cooperate through shared programs, student cross-registration, shared faculty and other innovative means to avoid shortchanging students who happen to live in a district where enrollment cannot support a full range of programs. The Department and local school districts frequently turn to the six regional educational service centers (RESCs) for help with cooperative activities throughout the state. They provide a base and a means for school districts to offer programs cooperatively and for the Department of Education to translate state programs into meaningful regional activities. The RESCs, for example, served as the bases for the 1984 summer Institute for Teaching and Learning sponsored by the Department.

The Department will continue to facilitate such arrangements not only to ensure that all students have access to mandated curricula but that they also have opportunities to participate in optional enrichment activities.

Another means of providing learning opportunities and ensuring the currency of the curriculum is through partnerships between schools and various organizations, including businesses. A recent survey of the national program, Partnerships in Education, conducted by the U.S. Department of Education, identified 46,338 partnerships. Connecticut reported 470 cooperative arrangements with businesses, 56 with civic organizations, 33 with colleges and universities, 15 with government agencies, 11 with foundations, and 15 other. A cooperative endeavor, for survey purposes, was defined as one in which "a formal arrangement is made to share resources (human, material or financial) with the ultimate objective of promoting the interests of the school."

While nationally most districts reported such partnerships to be on the increase, the least common type of support involves the sponsor directly in the classroom or in tutoring. In Connecticut, classroom teaching on a regular basis by anyone other than a certified teacher would require statutory amendment or a change in the teacher certification regulations. In 1984, legislation established Project Donate which allows the private sector to donate the services of a specialist in a shortage area to teach part-time without certification, provided the individual is not paid by the school district and does not replace a certified teacher. The business firms which donate the services are eligible for tax credits under the Neighborhood Assistance Program.

Maintaining this kind of flexibility in the educational system to meet the continually changing needs of Connecticut's citizens presents a challenge that can only be met by the joint commitment of state and local institutions of government and education. The State Board of Education and the State Department of Education urge all those concerned with improving teaching and learning in Connecticut to join the State Board and the Department of Education in their commitment to meeting the challenge.

Educational Achievements

The ultimate measure of the effectiveness of a school system lies in its educational achievements, as reflected by the performance of its students and its graduates. To assess the condition of education in Connecticut's public schools, Department of Education staff have collected and analyzed data with a number of key questions in mind:

- How many of the children who enter Connecticut's public schools complete high school and graduate?
- What percentage of high school graduates continue their education?
- What are the job placement records of the state's high school graduates, including graduates of the regional vocational-technical high schools?
- What do Connecticut's statewide proficiency and achievement tests tell us about students' academic achievements and how are teachers using the results to improve performance?
- How do this year's test scores compare with the scores of previous years?
- What gains have Connecticut students made in the '80s in their competencies in mathematics, reading and language arts?
- How do Connecticut's students score on scholastic aptitude and achievement tests and how do their scores compare with the national and regional averages?
- Of those who are college-bound, how many earn advanced placement through qualifying exams?

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- How many adults, who did not finish high school, return to complete the requirements for their diplomas through adult education courses or take the general educational development (GED) tests and earn a state high school equivalency diploma?

These and other questions are addressed by the tables and graphs in this section of the report.

High School Graduates

In 1983, the number of students in local public high schools receiving high school diplomas was 78 percent of the number in 9th grade in 1979. (The comparable graduation rate for those in the state-run vocational-technical schools was 77 percent.) The local graduation rate has increased each year since 1980, when it hit a low of 75 percent, having dropped steadily from its previous high of 82 percent in 1973. The attrition is accounted for by students who move or enroll in private schools, as well as by dropouts.

The Connecticut decline and rise follow the national trend, but are more severe. The national graduation rate fell from about 76 percent in 1973 to 73 percent by 1980, and then rose to a little over 75 percent in 1983. Connecticut's rate of graduation from high school consistently has exceeded the national average.

Graduation Rate of Public School Students

Year in 9th Grade	Number	Number of Graduates Four Years Later	Completion Percentage
1979	46,455	36,204	77.9
1978	49,706	37,706	75.9
1977	50,688	38,235	75.4
1976	50,447	37,683	74.7
1975	52,241	39,727	76.0
1974	51,510	39,914	77.5
1973	51,179	40,393	78.9
1972	52,430	40,612	77.5
1971	51,850	40,479	78.1
1970	48,723	39,340	80.7
1969	47,973	39,349	82.0

Source: CT Department of Education

Although the total number of diplomas awarded has been relatively steady at more than 50,000 over the past decade, the number awarded by the different types of institutions has changed significantly. The numbers of diplomas awarded by the vocational-technical schools and through the GED testing program have increased, the number awarded by the nonpublic schools has remained unchanged, and the number awarded by the local public schools has declined moderately. The Department projects that the number of diplomas awarded by the public schools and state vocational-technical schools (currently around 38,700) will continue to fall, due primarily to declining secondary school enrollments, reaching below 25,000 by 1994 before starting to increase.

High School Equivalency Examinations

Year	Tests Administered	Tests Passed
1983	7,636	5,216
1982	7,987	4,625
1981	6,588	3,984
1980	6,804	4,883
1979	7,230	4,310
1978	7,297	4,317
1977	7,772	3,877
1976	7,551	3,945
1975	6,900	3,662
1974	6,131	3,546
1973	5,791	3,224

Source: CT Department of Education

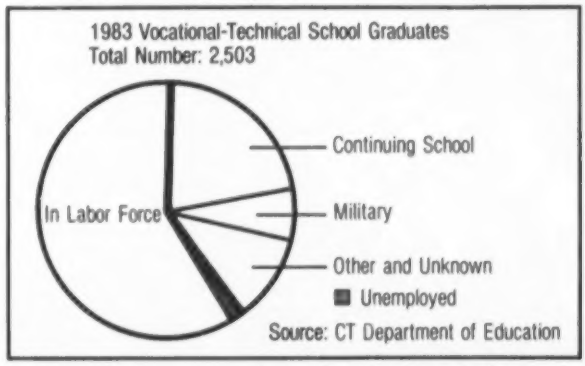
High School Diplomas

Year of Graduation	Local Public	Vocational-Technical*	Nonpublic	GED	Total
1983	36,204	2,503	6,229	5,216	50,152
1982	37,706	2,518	6,029	4,625	50,878
1981	38,235	2,410	6,021	3,984	50,650
1980	37,683	2,355	6,027	4,883	50,948
1979	39,727	2,206	6,186	4,310	52,429
1978	39,914	2,267	6,088	4,317	52,586

*Secondary-level occupational program completers. Synonomous with graduates.

Source: CT Department of Education

Particularly interesting are the recent statistics concerning graduates of the state-run regional vocational-technical high schools. The growth of these schools is reflected in the number of graduates—2,503 in 1983 compared to 1,607 ten years ago, a 55 percent increase. The growth has slowed in recent years. The current number of graduates is fewer than last year's number and only 11 percent greater than the number of five years ago. The highest percentage ever—22 percent—are continuing their education. Ten years ago only 11 percent of the graduates did so. A healthy 65 percent of the 1983 graduates in the civilian labor market are working full-time in occupations related to their training, a substantial percent increase over 1982 and 1981. An additional six percent of the graduates joined the military.



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Adult Basic Education

The increasing number of adults who earn high school equivalency diplomas by passing all parts of the general educational development test is discussed earlier in this report. Of the 5,216 adults who passed the general educational development test in 1983-84, 3,228 were taking the test for the first time. This is by far the highest number to have successfully completed the program in a single year.

Among those completing mandated adult education programs in 1983-84, 256 persons received their citizenship, 394 were removed from the public assistance rolls, and 1,707 upgraded their employment or obtained employment, according to follow-up reports from the school districts and community agencies.

Benefits of Adult Basic Education Programs*

Year	Obtained HS Diploma or Equivalent	Removed from Public Assistance Rolls	Upgraded or Obtained Employment	Received Citizenship
1983-84	3,228	394	1,707	256
1981-82	1,904	358	1,237	277
1979-80	1,113	231	1,274	227
1977-78	1,804	374	1,431	215
1975-76	1,375	217	954	201
1973-74	1,234	111	630	286

*This data is collected from end-of-year program reports submitted by local districts and community based organizations receiving state and federal adult education funds.

Source: CT Department of Education

High school graduates are three times more likely than high school dropouts to find jobs. According to the 1980 Census, of the 14,872 Connecticut youths age 16 to 19 who sought work after dropping out of school without graduating, 3,571 (24 percent) were unemployed, but of the 28,068 Connecticut youths of the same age who sought work after graduating from high school, only 2,159 (8 percent) were unemployed.

In 1983 the Department recorded the highest number of adults to qualify for their high school equivalency diplomas in a single year. In all, 5,216 adults either passed the GED test or, upon retaking, passed the parts they had previously failed. This number is 13 percent above the prior peak in 1980 and 61 percent higher than ten years ago. (The dip in 1981 was created by a breach in test security resulting in a temporary suspension of GED testing.) Of those taking the test, 31 percent were under 20 years old, 49 percent were male and 32 percent were minorities. Half prepared for it exclusively in adult education programs offered by the schools, 37 percent prepared themselves, and the remainder used various learning means such as television, private tutors or correspondence schools.

One may reasonably assume from these numbers that the emphasis on adult education is beginning to pay off and that students who dropped out before finishing high school are recognizing the importance of having a diploma and doing something about it. Of Connecticut residents taking the GED tests in 1983, 24 percent of the total number cited "future employment" and 29 percent cited "admission" to postsecondary educational programs as their reason for seeking a high school equivalency diploma.

Going on to Further Study

Another frequently used measure of the success of a high school education program is the number of graduates who go on to further education. By this yardstick, Connecticut's schools are doing well. In 1983, 65 percent of the high school graduates went on to some form of postsecondary education. By comparison, the National Center for Educational Statistics (NCES) reported that, in the fall of 1980, 54 percent of the nation's high school graduates went on to some form of postsecondary education in the fall of 1980.

The percentage of high school graduates going on to four-year colleges reached an all-time peak of 43 percent in 1983. Ten years ago 38 percent went on to four-year colleges. NCES reports that 31 percent of

Public High School Graduates Continuing Their Education

Year of Graduation	Total[1] Graduates	Continuing Education[2] Number	Continuing Education[2] Percent	Four-Year College Number	Four-Year College Percent	Two-Year College Number	Two-Year College Percent	Vocational Program Number	Vocational Program Percent	Other Education Number	Other Education Percent
1983	36,204	23,581	65.1	15,614	43.1	4,975	13.7	2,419	6.7	575	1.6
1981	38,577	24,199	62.7	16,338	42.4	4,706	12.2	2,565	6.6	590	1.5
1979	39,770	24,328	61.2	16,381	41.2	4,899	12.3	2,506	6.3	542	1.4
1977	40,393	24,240	60.0	15,892	39.3	5,245	12.9	2,803	6.9	300	0.7
1975	40,479	24,619	60.8	15,798	39.0	5,464	13.5	3,079	7.6	278	0.7
1973	39,349	23,873	60.7	14,956	38.0	5,446	13.8	3,267	8.3	204	0.5

[1]Includes graduates from Norwich Free Academy, Gilbert School and Woodstock Academy
[2]The activity of approximately five percent of the students is unknown.

Source: CT Department of Education

Public High School Graduates In Career-Related Activities

Year Of Graduation	Total Graduates[1]	Activity[2] Seeking Careers Number	Seeking Careers Percent	Military Number	Military Percent	Employed Number	Employed Percent	Unemployed Number	Unemployed Percent
1983	36,204	10,785	29.8	1,548	14.4	7,979	74.0	1,258	11.7
1981	38,577	11,751	30.5	1,446	12.3	9,008	76.7	1,297	11.0
1979	39,727	13,040	32.8	1,406	10.8	10,383	79.6	1,251	9.6
1977	40,393	13,166	32.6	1,610	12.2	9,808	74.5	1,748	13.3
1975	40,479	13,241	32.7	1,463	11.0	9,820	74.2	1,958	14.8
1973	39,349	13,013	33.1	980	7.5	10,592	81.4	1,441	11.1

[1]Includes graduates from Norwich Free Academy, Gilbert School, Woodstock Academy
[2]The activity of approximately five percent of the students is unknown. Percentages are based on the total seeking military or civilian careers.

Source: CT Department of Education

students nationally attended four-year institutions in 1980.

The 1983 Connecticut figure of 65 percent of high school graduates going on to pursue further education is an increase from a low point of approximately 60 percent in 1974. At the same time, the number of high school graduates entering the job market—10,785 or 30 percent of the total 36,204 high school graduates—was the lowest number in the past ten years, nearly 3,000 fewer than the 1976 peak of 13,677.

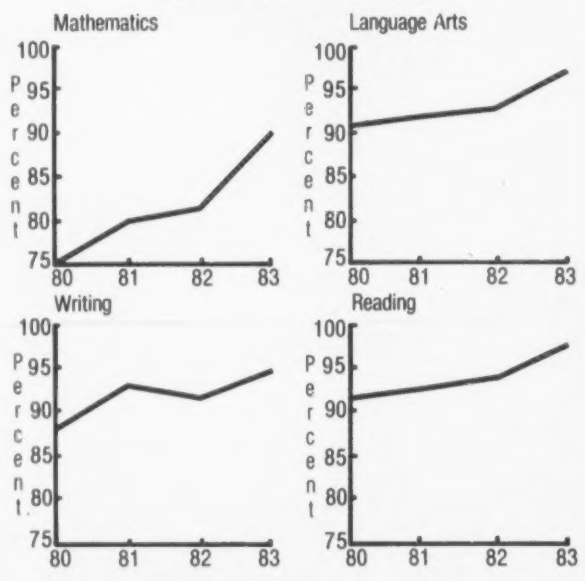
State Testing Programs

Connecticut has two state-run testing programs to assess the achievement of its students. The 9th grade proficiency test, part of the state's Educational Evaluation and Remedial Assistance (EERA) program has been administered by the State Department of Education since 1980. Its purpose is to identify low-performing students in need of remedial help to master the basic skills of mathematics, writing and reading. The second program, called Connecticut Assessment of Educational Progress (CAEP), assesses student performance in grades 4, 8 and 11, in specific subject areas—mathematics, reading, science, social studies, career education, art and music—and compares their performance over time with both their Connecticut predecessors and their national counterparts.

Basic Skills Achievement. The results of the proficiency tests indicate that

- Connecticut 9th graders have improved in each of the skill areas during the period from 1980 to 1983;
- in reading, the percent of students surpassing the state standard increased by nearly six percent so that, currently, 97 percent of the students meet the standard;
- in language arts, an additional five percent of the students exceeded the statewide level of expected performance (SLOEP) by 1983, raising the total percent to 96;
- in writing, the percent of students reaching SLOEP increased by seven percent to 94;
- the most dramatic gains occurred in mathematics in which, by 1983, an additional 15 percent of the students exceeded the SLOEP, raising the total to 90 percent;
- urban districts have shown the most notable improvement on the proficiency test results. In 1980, 67 percent of the students in urban districts scored

Connecticut Ninth Grade Proficiency Test Results*
(Percent Above State Standards)



*Tests Administered in October of School Year

Source: CT Department of Education

below SLOEP on at least one subtest. By 1983, this percentage had been reduced to under 41 percent. An additional 27 percent of 9th grade urban students had improved their achievement to meet the SLOEP in each of the basic skill areas.

In summary, most Connecticut students are demonstrating at least minimal proficiency or better in the basic skills areas and the proportion of 9th grade students exceeding SLOEP has been steadily increasing. However, the numbers also show that more than one in seven students reaches grade 9 without attaining minimum proficiency in at least one basic skill area.

For students who do not meet SLOEP in any subject, the test is readministered in grades 10 through 12. In 1982, over 70 percent of the retested 10th grade students and 66 percent of the 11th grade students exceeded the SLOEP in each of the areas being reassessed, an indication that remedial instruction is successful for many students.

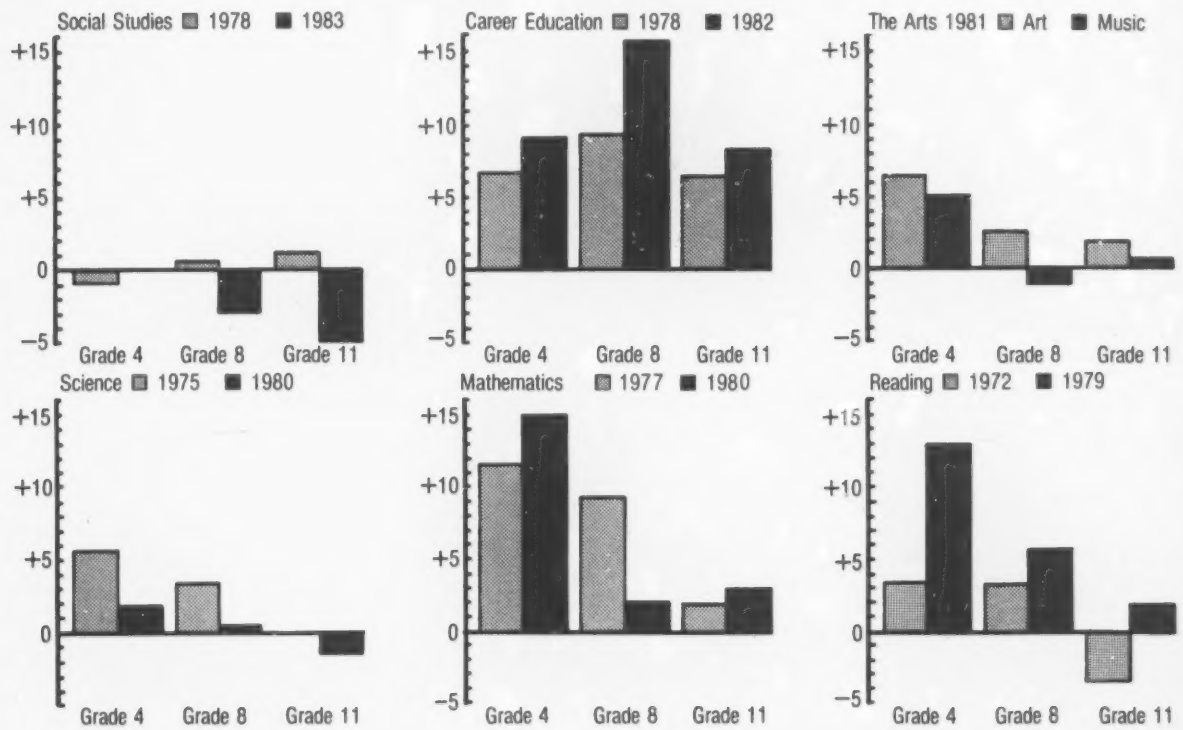
Besides the 9th grade proficiency test, the EERA legislation also requires the administration of standardized norm-referenced achievement tests in a minimum of three nonconsecutive grades from one through eight. Each district selects tests to assess mathematics, reading and language arts achievement in the elementary and middle grades. The results of these tests are collected by the Department biennially and analyzed to determine trends.

Two general trends have emerged from the analyses of 1980 and 1982. First, Connecticut students compare favorably with students across the nation, generally scoring better than approximately two-thirds of the students in each grade from two through eight. Secondly, scores improved between 1980 and 1982 in almost every grade and subject area assessed.

The analyses also provided several important indicators of the incidence of remediation in the State. At each grade level, the percentage of students in need of remediation varied from 20 percent to 26 percent. Slightly higher percentages were reported for mathematics than for reading and language arts.

Subject Area Achievement. With CAEP, Connecticut became the second state, after Minnesota, to administer National Assessment of Educational Progress (NAEP) items to a sample of students. The CAEP program helps, to describe the condition of education in Connecticut by identifying strengths and weaknesses in the curricular areas; monitoring change in student performance over time and comparing the performance of Connecticut's students at grades 4, 8 and 11 with similar students nationwide. The program also encourages local

Connecticut Assessment of Educational Progress:
Percentage Point Difference From National Average



Source: CT Department of Education

CAEP Social Studies Results

Topic	Grade 4 No. Items	Grade 4 Answers % Correct 1977-78	Grade 4 Answers % Correct 1982-83	Grade 8 No. Items	Grade 8 Answers % Correct 1977-78	Grade 8 Answers % Correct 1982-83	Grade 11 No. Items	Grade 11 Answers % Correct 1977-78	Grade 11 Answers % Correct 1982-83
Anthropology	1	77	83	3	72	74	1	71	72
Citizenship	0	—	—	5	70	70	4	72	69
Economics	2	80	84	4	64	62	4	56	54
Geography	2	56	57	3	55	53	1	83	79
History	1	70	71	1	79	78	5	61	62
Political Science	3	73	76	12	50	50	8	57	56
Process Skills	2	81	88	—	—	—	—	—	--
Sociology	1	89	94	2	58	57	0	—	--
Average (weighted)		74	78		59	59		62	61

Source: CT Department of Education

school districts to use CAEP testing for local evaluation and planning.

Since 1971, assessments have been conducted in reading, mathematics, science, social studies/citizenship, career education, and art and music. In 1983-84, reading was expanded to an English language arts assessment which includes writing, listening, study skills and computer literacy. In the vocational area, a business and office education assessment during 1983-84 tested all 12th graders in accounting, secretarial and general office skills.

A common finding in the most recent mathematics, social studies and language arts assessments is that students do well on the literal comprehension level and not so well at the higher levels of thinking. Our students have learned a lot. They have many facts at their command and can solve simple one-step problems. However, when they are asked to infer, integrate and evaluate, performance drops. Furthermore, when they are asked to solve more complex problems requiring several steps, performance drops. In addition, when students are asked to develop and maintain a point of view and support it with reliable and sufficient evidence, performance is poor. This is true also on the National Assessment of Educational Progress and, in 1982, the Educational Commission of the States confirmed the finding, reporting that "the pattern is clear: the percentage of students achieving higher order skills is declining."

CAEP results are reported on a statewide, aggregated basis only. Districts exercise the option to test a sample of their students and receive data about their programs directly from an external vendor.

These statewide results allow the State Board of Education, the legislature, the educational community and the public to take the pulse of educational achievement at regular intervals and to act in accordance with the findings. Among recent innovations is the addition of computer literacy to the language arts assessment. A listening test was developed, using a paced audiotape that includes note taking and dictation exercises. Assessments of narrative and persuasive essay-writing ability have been developed as refinements to the prose-writing test. Test results generate workshops on curriculum and may trigger changes in the curriculum or in the assistance to local districts provided by the Department.

College-Bound Students

Annually, the College Board provides Connecticut with the results from three of its national testing programs: (1) the Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test (PSAT/NMSQT); (2) the Scholastic Aptitude Test (SAT); and (3) the Advanced Placement Tests (AP). The results of these tests have been used to monitor how a portion of Connecticut's public and nonpublic school population—those planning to attend college—have performed.

National Merit Scholarship Programs. Many college-bound students take PSAT/NMSQT in their junior year of high school as preparation for the SAT and to qualify for a National Merit Scholarship. Both the verbal and mathematics PSAT average scores in Connecticut in 1983 were above the national averages and above the previous year's Connecticut scores. The 1983 verbal average in the state, on tests which are scored from 20 to 80, was 42.4. This is 1.5 points above the national average and 0.1 above the prior year's state average. The mathematical average of 45.3 was 0.3 points above the prior year's state average and 0.6 points above the 1983 national average. The 1983 results of these tests continue a consistent ten-year trend in which Connecticut's scores exceed the national average.

National Merit Semifinalists and Commended

Students are determined by scores on the PSAT/-NMSQT. Less than one-half of one percent (0.5 percent) of each state's students can qualify as National Merit Semifinalists. The National Merit Scholarship Corporation has reported that the score used to determine the Connecticut semifinalists was the highest standard in the nation. In the 1985 Merit Program (based on October 1983 test results), 220 students from 94 high schools were named semifinalists. Also, 1,103 Connecticut students, three percent of the nationwide number, were named Commended Students. This is twice the number that would be expected based on the relative number of Connecticut seniors.

Average Scores Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test (PSAT/NMSQT) For College-Bound Juniors

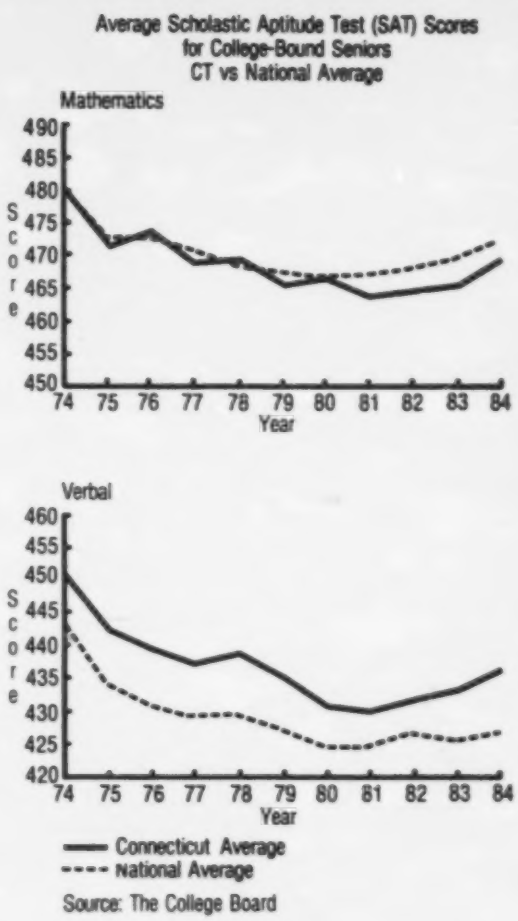
Test Year	Expected Year of Graduation	Verbal		Mathematics	
		Connecticut	Nation	Connecticut	Nation
1983	1985	42.4	40.9	45.3	44.7
1982	1984	42.3	41.1	45.0	44.7
1981	1983	42.8	41.5	45.6	45.1
1980	1982	41.9	40.6	45.2	45.2
1979	1981	41.6	40.3	45.3	45.3
1978	1980	42.2	40.6	45.3	44.8
1977	1979	41.5	40.0	44.3	44.2
1976	1978	41.7	40.5	45.2	45.0
1975	1977	41.9	41.1	45.6	45.5
1974	1976	42.7	41.6	46.2	45.9

Source: The College Board

Scholastic Aptitude Tests. On the SATs taken in 1983-84, the verbal average score of Connecticut students was above and the mathematics average score below the national averages. Scores on both tests have increased for the past three years. Connecticut's average verbal score was 436 compared with the national average of 426; the state's average mathematics score was 468 compared to the national average of 471. The highest scores of the past ten years both verbal and mathematics for both Connecticut and the nation were achieved in 1973-74, when the verbal was 452 in Connecticut and 444 in the nation and the mathematics reached 480 in both Connecticut and the nation.

Using a score of 600 on the SAT as a standard of excellence, it is interesting to note that in 1983-84, nine percent of Connecticut's college-bound seniors equaled or surpassed this standard on the verbal SAT. On the mathematical SAT 16.2 percent scored above the standard. This percentage was the highest in Connecticut since 1973-74, and the percentage above 600 on the verbal SAT was surpassed only twice in the past ten years.

The College Board estimates that 62.8 percent of Connecticut's 1984 graduates took the SAT. Nationally, only one out of three students take the SAT. This ranked Connecticut first nationally, slightly ahead of Massachusetts. This high percentage means that Connecticut has expanded its college-bound talent pool more than other states, making state-to-state comparisons difficult. Nonetheless, the recent federal state-by-state rankings found that on the combined SAT score Connecticut ranked fourth (out of 22 states in which the SAT is the predominant test of college-bound students) behind New Hampshire, Oregon and Vermont.



Source: The College Board

Another test given college-bound students is the Test of Standard Written English. It was first given nine years ago to help colleges place students in appropriate freshman English courses. The test is scored on a scale from 20 to 80. The Connecticut average on this test has been consistently superior to the national average. From Connecticut's average score of 44.2 in 1974-75 until this year, the average score dropped a fraction of a percentage point each year. The 1983 score of 43.3 was the first rise in average score and may mark a turnaround from the downward trend.

Connecticut's high schools participate in several programs that award college credit for advanced courses. In addition to the College Board's Advanced Placement Program, some schools participate in the University of Connecticut's Cooperative Program and others in the International Baccalaureate program.

Average Scores of College-Bound Seniors On Test of Standard Written English
Scale: 20 to 80

	Males		Females		Total	
	CT	Nation	CT	Nation	CT	Nation
1983-84	42.5	41.9	44.1	43.3	43.3	42.6
1982-83	42.1	41.6	43.7	43.0	43.0	42.3
1981-82	41.8	41.7	43.1	42.8	42.5	42.3
1980-81	41.9	41.5	43.3	42.9	42.6	42.2
1979-80	42.3	41.7	43.7	43.0	43.0	42.4
1978-79	42.3	41.8	44.2	43.2	43.3	42.5
1977-78	42.8	42.0	44.6	43.5	43.7	42.8
1976-77	42.9	42.2	44.5	43.7	43.8	42.9
1975-76	42.9	42.1	44.9	44.0	43.9	43.1
1974-75	43.0	42.2	45.4	44.3	44.2	43.2

Source: The College Board

Advanced Placement Tests. AP examinations are offered by the College Board to give any high school student (not just students in the AP Program) an opportunity to demonstrate college-level achievement. Nationally, about 27 percent of secondary schools and 16 percent of college-bound students participate. In Connecticut in 1983-84, students in 99 of the 141 public high schools (70.2 percent) took at least one AP examination. The 4,220 students who took at least one test represented 14.2 percent of that year's college-bound seniors.

Advanced Placement Test Participants

	--------Number of--------			*Percent scoring
Year	Schools	Students	Examinations	three or better
1979	133	2,749	3,602	77.0
1980	139	3,111	4,190	77.0
1981	143	3,570	4,817	76.0
1982	143	3,604	4,934	75.0
1983	154	3,790	5,115	76.0
1984	155	4,220	5,757	76.5

*Scale: 1 to 5

Source: The College Board

Each of the 24 AP tests in 13 fields is scored on a five-point scale: 5—extremely well qualified, 4—well qualified, 3—qualified, 2—possibly qualified, and 1—no recommendation. Most colleges accept scores of three or better for college credit.

In Connecticut in the spring of 1984, 4,220 students from both public and private high schools took a total of 5,757 advanced placement tests. This is both the highest number of tests ever taken and the highest number of students to take them. Two possible reasons for this surge of interest may be the increasing publicity given the advanced placement tests and the increasing cost of a college education.

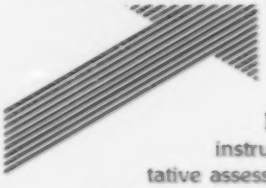
Advanced Placement Test Results

	Number of Students		
Score	Public	Nonpublic	Total
5	429	542	971
4	626	764	1,390
3	964	1,081	2,045
2	460	527	987
1	188	176	364
TOTAL	2,667	3,090	5,757
Mean	3.24	3.31	3.28

Source: The College Board

Of the Connecticut students taking these tests, 76.5 percent scored three or better compared with 69.5 percent of students nationally. Of Connecticut's public school students, 75.7 percent scored three or better, compared with 68.6 percent of public school students nationwide and 77.2 percent of Connecticut's nonpublic school students.

Meeting *The Challenge*



The idea of testing is not new to Connecticut. Its testing programs have been instrumental in providing a quantitative assessment of student performance, progress and special needs. However, rising test scores, rather than being hailed as an unqualified success, have generated some strong criticism. One charge is that the 9th grade proficiency test, using some items taught up to and including 8th grade, does not set high enough standards for 9th graders. Other important questions have arisen: Is this a true statewide indicator of student achievement? And are students who need remedial help actually being identified early enough?

Consequently, Connecticut's testing programs are being modified. In 1984, at the urging of the Commissioner and the State Board of Education, the General Assembly adopted legislation to replace the proficiency tests with a mastery testing program. The tests will be administered in grades 4, 6 and 8, and will be criterion-referenced; that is, students will be measured against objectives that they can reasonably be expected to meet at given grade levels rather than against the performance of other students.

The 9th grade proficiency test will continue to be administered through the school year 1986-87, after which it will be replaced by the 8th grade mastery test. The 4th grade test, pilot-tested in the fall of 1984, will be administered formally for the first time in 1985. The 6th and 8th grade tests will be introduced a year later.

The mastery testing program is designed to meet the following new objectives:

- **Earlier identification** of students needing remedial education. Too many of our students enter secondary schools deficient in basic skills; for many, remediation comes too late. In order to provide for meaningful intervention, it is critical to target individual student and district needs at a stage well before the beginning of high school.

- Testing a **more comprehensive range** of academic skills. The breadth of the test content will incorporate those skills that are considered reasonable and necessary for most students to master during the previous grades. This will include critical thinking skills such as evaluation and problem solving, areas in which the CAEP assessment indicates student deficiency.

- **Higher expectations and standards** for student achievement. Our expectations for our students should go beyond minimum competency: we must look to mastery as our standard.

- **More useful test achievement information** about the specific strengths and weaknesses of students, schools and districts. This will be accomplished by providing skill-level information to parents, classroom teachers, administrators and state curriculum consultants and committees.

- **Improved assessment** of suitable equal educational opportunities. Student outcomes are important indicators of equity of access. Statewide measurement of student performance provides the only means of assessing whether **all** our students are progressing and acquiring skills within a reasonable time frame.

- **Continuous monitoring** of students in grades 4, 6 and 8. Currently, the only statewide basic skills testing program takes place in the 9th grade. State policymakers need a more coordinated, continuous monitoring system to examine needs and disparities statewide.

The statewide mastery test will be administered each year during the month of October, starting in 1985. The specific skills to be tested within the three content areas of reading, language arts, and mathematics for the mastery tests were identified by subject-matter committees composed of educators and members of the general public. Surveys were sent to a sample of teachers, administrators and parents to determine the appropriateness of these skills for the mastery test. Following these activities, the lists of specific skills were revised to reflect the survey results and the procedures used for selecting specific skills for grade 4 are used for developing the 6th and 8th grade tests.

For grades 4, 6 and 8, there are three parts to the EERA Mastery Testing Program: Reading/Language Arts, Mathematics, and Writing.

Reading/Language Arts: "The Degrees of Reading Power" test is designed to measure a student's ability to understand nonfiction English prose at different levels of reading ability. The test measures reading ability on a scale of reading difficulty. This test is keyed to many available reading materials so teachers can use the scores to select reading matter on an appropriate level of difficulty for each student and serve as the point for improving his or her reading skills.

In addition to the "Degrees of Reading Power," the reading test will consist of narrative, expository, and persuasive passages on a variety of topics that will measure students' ability in (1) literal comprehension (2) inferential or interpretive comprehension and (3) critical reading or evaluation comprehension. The test will also assess listening comprehension in the three areas listed above by using a tape cassette and recorder. Writing skills is comprised of the following objectives: (1) usage, (2) mechanics, (3) study skills, and (4) note taking.

Writing: Students are asked to write a composition on a designated topic. The writing is judged on students' demonstrated ability to convey information in a coherent and organized fashion.

Test of the Imagination

Testing is not all facts and figures. Consider these extracts from compositions written by students in reply to the question:

What place, before all others, would you like to visit?

First is a reply that starts: "Human nature unquestionably can slant a story, changing details . . . In choosing a place to venture to, I have chosen the past. My mind is just yearning to know the true stories behind the legends."

Then there is the almost plaintive reply that makes us wonder why Connecticut can't fill this need. "I wish to visit a place called The High School of the Performing Arts in New York. The reason I would like to visit there is because I like to dance, sing and act."

Finally there is the stunner, written by a true son of Mark Twain, that starts quite simply, "I would like to visit heaven before I go there permanently."

Mathematics: At each grade level, the mathematics test assesses specific skills in the general areas of conceptual understandings, computational skills, problem solving/applications, and measurement/geometry. Test items will evaluate students' ability to order, round and rename numbers; compute and estimate with whole numbers, fractions and decimals; read and interpret tables, graphs and charts; solve a broad range of problems; and measure, estimate and convert with both customary and metric units.

After Testing, What?

Testing raises as many questions as it answers. What do we want to teach? Are we teaching it? Are we testing what we say we are teaching? Are we succeeding at teaching it? How should the curriculum be modified and aligned to work in tandem with testing?

There is more to assessment than the testing itself. Over the past few years, the Department has turned its attention increasingly to program evaluation as an important component of assessing the state of education. Major efforts are underway to evaluate the state's bilingual education program. An evaluation of the school effectiveness program was completed in 1984 and a program evaluation system is being developed in the area of special education.

As more time and energy are being devoted by school districts, particularly those whose students have the greatest academic need, to bringing their testing, evaluation and curriculum into alignment, the State Department of Education also is concentrating its efforts on this. Recent legislation, such as the new statewide graduation requirements, will have to be assessed in the future to determine whether it has had the desired effect—to raise educational standards for Connecticut's students.

Section 3 which follows describes the many ongoing programs—those directly related to instruction as well as those in support of learning—through which the Department pursues excellence.

3 Programs

What students learn, how they learn it and how well have traditionally been a matter of local option in Connecticut. Children are required to attend school from age seven through 16, but prior to 1979 there was no law regarding the standard curriculum or prescribed subjects. Legislation mandated programs and services to groups with special needs but the basics that make up a general education were not mentioned in the General Statutes. High schools granted diplomas according to local and diverse requirements.

In 1979 the General Assembly mandated that each school district must offer programs in 11 subject areas and in 1983 the first legislation was adopted authorizing boards of education to grant high school diplomas only to students who satisfactorily complete a minimum of 18 credits. This was amended in 1984 to 20 credits, distributed as follows: four in English; three in mathematics; three in social studies; two in science; one in the arts or vocational education; one in physical education and six electives. A credit is deemed to be the equivalent of a 40-minute class period for each school day of of a school year. Currently only courses taken in grades 9 through 12 satisfy the requirement.

The institution of minimum standards for program offerings statewide is important in two ways: it raises expectations regarding student performance and it brings the state closer to equal educational opportunities for all Connecticut students.

Most of the state's elementary and secondary students attend the public schools during the day and are enrolled in the regular kindergarten through 12th grade classes offered by the state's 165 local school districts. The State Department of Education is responsible for assisting the local districts to plan, implement and evaluate their curriculums. Most services that the agency provides to local school districts in support of instruction are provided by three divisions: Curriculum and Professional Development; Education Support Services; and Vocational, Technical and Adult Education. Rehabilitation programs for handicapped adults are provided by the Division of Vocational Rehabilitation.

Generally speaking, Department programs are oriented toward

- kindergarten through 12th-grade curriculum, including vocational and adult education;
- learners with special needs;
- programs for special purposes;
- teacher preparation, certification and continuing professional development for teachers, and
- recognition for outstanding teachers, students and programs.

Curriculum Services For All Grades

A large part of the day-to-day activities of the staff of the State Department of Education is to assist local school districts by providing consultation and technical assistance; helping with planning and policy development; advising on curriculum development and furnishing curriculum materials; and conducting workshops for school personnel on a wide variety of topics including professional development, bilingual education, library media skills and sex equity, as well as on specific subjects which are taught in the schools.

In 1981 and 1982, Department staff and subject-area advisory committees wrote, published and disseminated guides to curriculum development in the 11 mandated areas of study: the arts, consumer education, career education, foreign languages, health and safety,

language arts, mathematics, physical education, science, social studies and vocational education. The series began with an overall guide entitled: *Guide to Curriculum Development: Purposes, Practices and Procedures.*

The curriculum guides won a Distinguished Achievement Award from the Educational Press Association of America in 1982 for the best series of publications on a single theme. The guides are used as a framework from which local school districts can plan, implement and evaluate their own instructional programs. Department staff members are available in each of the subject areas to provide on-site assistance in all aspects of curriculum development. In 1983-84, for example, members of the Bureau of Curriculum and Staff Development made approximately 300 individual visits to school districts.

The Department encourages and supports the use of instructional technology to facilitate learning. Instructional television (ITV) programs, evaluated and selected by the staff, are broadcast during each school day over Connecticut Public Television. The programs, totaling 400 hours of air time each year, cover the whole range of grades and subjects taught in the public schools. The Department supplies an ITV schedule and resource guide to all schools and, upon request, furnishes specific teaching materials related to each of the programs. There is no cost to local school districts for any of these services.

The use of computers in instruction continues to grow. Every high school in the state is using computers and, according to a 1982 survey, the use in middle/junior high schools has tripled since 1979; during the same period it increased by 600 percent in elementary schools. Fifty-six districts—approximately 35 percent of all districts—reported district-wide plans for implementing computer technology in the school programs. The purposes are twofold: to help students acquire computer literacy and as a tool to help them learn basic skills and other subjects for which appropriate software is available.

The quality of software is the key to effective use of the computer as an aid to learning in other subjects in the curriculum. To help provide districts with information on good educational software, the Department has joined the MicroSIFT network, a federally funded software evaluation project and has purchased a state membership in the Minnesota Educational Computing Consortium. In addition, the State Department of Education has entered into a contract with the Educational Products Information Exchange (EPIE) whose services consist of information about and evaluations of educational materials—computer hardware, software and textbooks. This agreement with EPIE will provide such services for all local and regional school districts at no cost to them. Finally, a curriculum guide for the use of computers in instruction was developed in 1984 and will be distributed in 1985 to all public schools and teacher training institutions.

Library media centers in Connecticut schools play a major role in instruction. The Department has published and distributed two documents to support this instructional role: *A Guide to School Library Media Programs* and its supplement, *Instruction in Library Media Skills.*

Kindergarten and Prekindergarten

In 1967 the Connecticut General Statutes were amended to lower the minimum age at which children can enter school from six to five and mandated that all public schools offer kindergarten. Since that time the state's public education system has been expanding to accommodate the growing interest in kindergarten and preschool education. Most programs are for a half-day, but this is now an area of instructional change.

Nine districts offer all-day or extended-day kindergarten programs for all children. In eight additional districts, some individual schools offer all-day programs; the extended program is not offered to all children in the district. In response to a recent Department survey, eight other districts indicated that they have all-day kindergarten under formal consideration and 33 districts are studying the feasibility of establishing extended programs.

Prekindergarten and Kindergarten
Enrollment in Public and Nonpublic Schools

School Year	Public		Nonpublic	
	Prekindergarten	Kindergarten	Prekindergarten	Kindergarten
1983-84	3,190	33,878	2,406	4,807
1982-83	3,811	33,245	1,954	4,572
1981-82	3,888	32,094	1,747	4,437
1980-81	4,371	32,515	1,601	3,906
1979-80	4,390	33,098	1,517	3,867
1978-79	3,828	34,213	1,581	3,619
1977-78	3,808	36,599	1,272	3,347
1976-77	3,353	42,192	1,042	3,416
1975-76	3,621	46,447	1,769	3,367
1974-75	3,309	46,539	1,725	2,881
1973-74	3,123	46,132	1,347	2,500

Source: CT Department of Education

The public, particularly parents of young children and agencies working with children whose homes offer limited learning opportunities, is paying increased attention to the idea of all-day kindergarten. Numerous statistics underscore the need for this consideration.

- The Census Bureau estimates that in 1980, 48 percent of Connecticut's three- and four-year-olds were in school (13,754 in public nursery school; 7,973 in church-related schools; and 18,798 in other schools).
- The 1983-84 enrollment of 5,596 in prekindergarten programs in both public and private schools is almost four percent above the level of five years ago and 25 percent above the level of ten years ago. Private prekindergarten enrollment has shown a consistent increase over the past five years from 1,517 in 1979-80 to 2,406 in 1983-84, while public school prekindergarten enrollment peaked at 4,390 in 1979-80 and has now declined to 3,190 in 1983-84. This parallels the overall decline in enrollment and reflects a drop in federal funds for programs targeted to disadvantaged populations. If analyzed in the context of the lowered birth rate and enrollment, the percentage of prekindergarten children being served is growing.
- In 1983-84, 57 percent of the 5,596 students in prekindergarten were in public schools. Many more preschoolers attend private day care centers. Connecticut has more than one thousand such centers, regulated by the State Health Department, with the State Department of Education responsible for reviewing the education component of the programs.
- The number of children ages three to five receiving special education services increased by 21 percent between 1978-79 and 1983-84 (from 2,949 to 3,566).

To help school districts respond to the growing need for early childhood programs, a Department of Education committee is at work on a guide to kindergarten curriculum development. The guide will present an array of options, based on programs that are working well, from which school districts can adapt and adopt to fit their local needs.

Mandated Courses and Graduation Requirements

In May 1984 the State Board of Education appointed a panel to study the statute, enacted in 1979, requiring all districts to offer planned, ongoing and systematic courses of study in 11 curriculum areas. The panel, in November 1984, in its report to the Board:

- recommended that the legislation be amended to require that "all children in grades 1-8 receive instruction annually" in the arts, language arts, mathematics, physical education, science and social studies and that other subjects—career education, computer education, consumer education, health and safety and library media education—be "offered over the course of grades 1-8";
- outlined the broad components of the courses to be given each year in grades 1-8;
- included computer education and library media education as subjects to be offered over the course of an elementary program and as part of the grades 9-12 program;
- stated that students in grades 7-8 as well as those in high school be offered an instructional program in vocational education and in foreign language annually, and
- specified 13 offerings for students in grades 9-12.

These changes will be proposed to the 1985 session of the legislature.

Link to the Nonpublic Schools

The State Department of Education, through its mandated responsibility for school and program approvals, has a vital link to the private schools in Connecticut. The Department approves and oversees the quality of education in private occupational, nonpublic and public schools, and in private special education facilities.

- **Nonpublic Schools.** The Advisory Council for School Approval, established by State Board of Education policy in 1982, recognizes accrediting agencies such as the New England Association of Independent Schools and Colleges; Connecticut Association of Independent Schools; Hartford, Norwich and Bridgeport Diocesan School Offices; Association of Christian Schools International, and the Elementary and Middle School Principals' Association of Connecticut, in addition to the Department of Education, as agencies to recommend schools for approval. The Council, in turn, may recommend these schools to the State Board for final approval. These groups voluntarily seek state recognition of their schools as official acknowledgement of their quality standards. In the 1983-84 school year the State Board approved 51 public and nonpublic schools.
- **Private Occupational Schools.** The Bureau of Adult Education monitors 100 private occupational schools and branches to assure quality operation. Compliance with Connecticut General Statutes is mandatory and approval must be given by the bureau for such schools to operate. The bureau also administers the Student Protection Fund, a revolving fund of approximately $650,000 which provides tuition refunds to students of private occupational schools that have ceased operation.
- **Special Education Facilities.** Special education facilities, which provide services to handicapped students, are also legally required to be approved by the Department of Education. There are 60 private special education facilities in Connecticut, serving approximately 3,100 students, most of whom are placed by local districts. The Department also approves programs in institutions providing day and residential services to handicapped students.

The same committee that studied the mandated courses also reviewed the legislation which was adopted in 1983 and amended in 1984 regarding high school graduation requirements. The State Board of Education has decided to review the requirements periodically as schools adjust to the 20 credit and course distribution requirements and recommend changes as needed.

Vocational Education in the Local Schools

Many students choose to enroll in vocational programs in their local high schools. Although the statistics show a drop in the actual number of students in vocational programs, that drop reflects the general enrollment decline, particularly in the junior high schools where students in vocational programs take consumer home economics and industrial arts.

Students who graduate from vocational programs in the comprehensive high schools are, on the average, starting in jobs at $1.15 per hour above minimum wage. They are apparently better prepared for entering the job market on a competitive basis than their classmates who did not receive vocational preparation.

There is no direct state grant to local school districts that is earmarked for vocational-technical education. These programs are supported by the same general aid formula that funds most programs. However, in 1982, the state legislature, recognizing the need to update vocational education equipment, passed the Vocational Equipment Act. Under this legislation, the General Assembly over the last three years has authorized $3 million in bond funds for schools to purchase or lease equipment for vocational education programs. Equipment purchased includes advanced computerized machines, offset presses and photocomposing units for industrial arts classes and microcomputers and word processors for business programs.

The greatest number of students continues to be in business and office education programs. Many are being prepared early to work with the latest technology. In many schools, computer literacy has become an integral part of the vocational curriculum.

In the local high schools, exemplary programs identified in 1983-84 range from individualized instruction in vocational skill development for academically disadvantaged students to a home economics program whose students surveyed residents of the community concerning their dietary habits; they analyzed the findings by computer, and then prepared and packaged low-salt and low-sugar foods for sale.

Some Connecticut students gain firsthand knowledge about the world of work before they graduate from high school through cooperative work experience programs. Sixty-four school systems offer programs serving approximately 3,800 students. In a cooperative arrangement between school and employers, students receive on-the-job training in an occupational field related to their classroom instruction. These programs are excellent examples of the potential of school-business collaboration.

Another way in which students learn about their communities is through membership in vocational student organizations, in which 9,000 students participated in 1983-84. Activities emphasize leadership, communication, community service and knowledge of the free enter-

1983 Vocational Program Completers and Placement Status in February 1984

	Local Education Agencies		Regional Vocational-Technical Schools*				Community Colleges/State Technical Colleges		Other Agencies*		Total	
			Secondary Level		Long-Term Adult							
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
TOTAL	17,811	100.0	2,503	100.0	645	100.0	1,614	100.0	525	100.0	23,098	100.0
Pursuing Education	8,726	49.0	548	21.9	25	3.9	170	10.5	268	51.0	9,737	42.1
Employed	5,595	31.4	1,459	58.3	488	75.7	745	46.2	92	17.5	8,379	36.3
Military	502	2.8	161	6.4	3	0.5	2	0.1	3	0.6	671	2.9
Unemployed	509	2.9	47	1.9	19	2.9	22	1.4	24	4.6	621	2.7
Other**	2,479	13.9	288	11.5	110	17.0	675	41.8	138	26.3	3,690	16.0
Average hourly wage of completers in full-time jobs related to training	$4.52		$5.50		$6.54		$8.24		$4.70		$5.32	

Students enrolled in industrial arts, consumer home economics, and in short term, part-time, exploratory and apprentice programs not included

* Includes both secondary and adult
** Not seeking employment or status unknown

Source: CT Department of Education

prise system. Students learn about their community by working with representatives from business and industry. In 1983-84, 9,000 students in Connecticut participated in the American Industrial Arts Student Association (AIASA), Distributive Education Clubs of America (DECA), Future Business Leaders of America (FBLA), Future Farmers of America (FFA), Future Homemakers of America/Home Economics Related Occupations (FHA/HERO) and Vocational Industrial Clubs of America.

Vocational-Technical Schools

The primary mission of the state's 17 regional vocational-technical schools is to provide occupational training to high school students and adults. At the same time, the schools must provide a full academic instructional program so that students will meet all the requirements for high school graduation. Almost 22 percent continue their education after graduation.

The 17 schools and four satellites comprise a statewide school system, governed by the State Board of Education and operated by the State Department of Education. Programs range from electronics and machine tool to hairdressing and fashion design. They are constantly being updated to adapt to changing technology and the marketplace. Twenty new or revised curricula were completed in 1983-84. They reflect the recommendations of the craft committees in each trade, for example, electronics, machine tool, signal and communications, and solar energy.

During the freshman year, which is exploratory, students will select the field in which they want to specialize. All freshmen take a computer literacy course. During the following three years, they spend an average of 27 hours a week in shop and laboratory work, while also completing the academic courses required for a diploma.

Students enrolled in local high schools are able to take advantage of vocational-technical school programs and facilities through either the satellite or shared-time programs. They receive their academic instruction in the local high school and vocational training at the satellite facility or, under a shared-time arrangement, they get their shop training at one of the state's vocational-technical schools.

Enrollments in the shared-time programs rose 81.3 percent from 1979 through 1983, the largest percentage increase in any of the types of programs offered. The number of women participating in shared-time programs, however, increased by 291.1 percent and their growing interest in vocational-technical training is reflected also in secondary programs. Overall, female enrollment rose 17 percent while male enrollment grew only two percent in the five-year time span.

More attention is being given to serving groups with

Vocational Enrollment by Program Area
1982-83

Occupational Programs	Local Education Agencies Grade 7-12	Vocational-Technical Schools*	Community Colleges/ State Technical Colleges	Other Agencies	Total
Agriculture	1,611		68	125	1,804
Business and Office	37,972	106	6,693	703	45,474
CWE/Diversified Occupations	3,133			480	3,613
Health	1,171	1,117	1,953	53	4,294
Marketing and Distribution	3,269		752	5	4,026
Occupational Home Economics	1,452	740	479	193	2,864
Technical, Trade and Industrial	1,864	14,795	1,028	2,695	20,382
Subtotal	50,472	16,758	10,973	4,254	82,457
Nonoccupational Programs					
Consumer Home Economics	87,371			74	87,445
Industrial Arts	35,496				35,496
RVTS Exploratory		4,049			4,049
Other	3,993	66	47	2,691	6,797
Subtotal	126,860	4,115	47	2,765	133,787
TOTAL**	177,332	20,873	11,020	7,019	216,244

* Includes all programs: secondary full-time day, satellite, shared-time, short-term and long-term adults and apprentice
** Students enrolled in both an occupational program area and in either consumer home economics or industrial arts are counted in both programs

Source: CT Department of Education

Adults Attending Vocational-Technical Schools, 1983-84

Program Type	Number Enrolled
Long-Term,	
Regular Secondary Day	309
Separate Adult Day	886
Short-Term Evening	2,035
*Apprentice	3,361
TOTAL	6,591
Program Name	
Construction Trades	2,514
Precision Production	2,088
Mechanics and Repair	1,006
Health	589
Food Service/Baking	64
Cosmetology/Barbering	42
Clothing/Fashion Design	10
Exploratory	10
Other	268
TOTAL	6,591

*Must be registered with the State Labor Department to enroll.

Source: CT Department of Education

special needs. Student-centered programs expanded this year include bilingual education, a program for the gifted and talented, a pilot program in the arts, and new services for the handicapped.

Efforts to attract a more diverse student body are matched by efforts to attract a more diverse staff. The numbers of women and minority staff members and administrators are increasing and the Department has instituted an administrative fellowship/internship program to help prepare candidates, particularly minorities and females, for careers as managers in the vocational-technical school system.

While all school systems face the problem of attracting qualified teachers, this is magnified in the vocational-technical schools because of direct competition from business and industry for specialists. The Department worked hard this year to meet the professional needs of the staff by expanding professional development programs which emphasize new techniques of instruction and by expanding participation in such recognition programs as Teacher of the Year.

Improved facilities and new equipment also make possible more effective instruction for students. Expansion and renovation of several regional vocational-technical schools are planned. State-of-the-art equipment is being installed so that students can be trained adequately to work in high technology fields which use computer-controlled machines and computer-assisted design. An asbestos removal program is producing better environmental conditions at the schools and a new student information management system (SIMS), designed to improve services to students through better administration, is on line. All schools are on SIMS and on an electronic mail system that may serve as a model for linking the Department of Education with all school systems in the state.

Jobs for Connecticut Youth

The vocational and training needs of disadvantaged and unemployed youth are part of the Department's agenda. Its Jobs for Connecticut Youth program, begun in 1981 to overcome barriers to employment for economically and educationally disadvantaged youth and to provide employers with an adequately prepared work force, served almost 3,000 young people in 1983-84. Financial support has come from both private and public sources.

Many of the area teams set up under Jobs for Connecticut Youth provide a vital link to the federal Job Training Partnership Act (JTPA) and have been in-

Vocational-Technical School Enrollments By Program Type

	Sex	1979	1983	Percent Change
Full-Time, Long Term[1]				
Secondary Day	Male	9,282	9,419	+ 1.5
	Female	2,322	2,989	+ 28.7
	Total	11,604	12,408	+ 6.9
Adults				
Regular Day	Male	224	260	+ 16.1
	Female	23	49	+113.0
	Total	247	309	+ 25.1
Separate Day	Male	246	453	+ 84.1
	Female	430	433	+ 0.7
	Total	676	886	+ 31.1
Apprentice[2]	Male	3,182	3,206	+ 0.8
	Female	170	155	– 8.8
	Total	3,352	3,361	+ 0.3
Part-Time				
Secondary Shared-Time[3] Day	Male	516	770	+ 49.2
	Female	79	309	+291.1
	Total	595	1,079	+ 81.3
Secondary Satellite Day	Male	260	334	+ 28.5
	Female	24	26	+ 8.3
	Total	284	360	+ 26.8
Short-Term Adult Evening Tuition	Male	2,004	1,624	– 19.0
	Female	690	411	– 40.4
	Total	2,694	2,035	– 24.5
TOTAL	Male	15,714	16,006	+ 2.2
	Female	3,738	4,372	+ 17.0
	Total	19,452	20,438	+ 5.1

[1] Five hundred hours or more

[2] Must be registered with State Labor Department to enroll. Program leads to journeyman status.

[3] Shared-Time: shop training for local district students

Source: CT Department of Education

strumental in helping communities take greater advantage of the full range of opportunities under JTPA. Some teams serve as the youth planning arm for JTPA and the Private Industry Councils (PIC) that are implementing JTPA.

Adult Education

Thirty percent of Connecticut adults over age 25 do not have high school diplomas. The census reports more than 600,000 persons over 18 in the state have not graduated from high school (this number includes 18- and 19-year-olds who are enrolled in high school and in the vocational-technical schools). No data are available on dropouts.

Adult education programs are offered throughout the state in English and citizenship for immigrants, in basic skills, and in preparation for the general educational development (GED) examinations leading to a high school diploma. Nearly 13,000 people were enrolled in 1983-84 in public school classes for adults with limited English skills and approximately 20,000 adults took high school level courses to prepare for the GED exams.

Programs for adults also include a whole range of both job-related and enrichment courses. In all, 121,053 adults took advantage of adult education offerings in their communities last year.

An important part of the Department of Education's programs for adults is provided by the Division of Vocational Rehabilitation (DVR) through its educational and counseling services to help prepare handicapped adults for productive lives. While the division's counseling and training are not carried out by the schools, links with the schools are maintained. In 1983-84, for example, DVR counselors were assigned as liaison to each public and private secondary school in the state that includes a 12th grade. The purpose is to ease the transition for special education students from school to work. DVR and the Division of Education Support Services coordinate their programs to facilitate the adjustment handicapped high school students must make from their individualized education programs to individualized rehabilitation plans.

During 1983-84 DVR provided one or more services to 16,039 adults with physical or mental disabilities. Services include counseling, evaluation, training, job placement and post-employment services. Of the total served, 7,249 were new to the program. Over 2,200, more than half of whom were severely disabled, completed their rehabilitation programs and were determined to be ready for employment.

Criteria for acceptance into the program are a medically based physical or mental disability that is a barrier to employment and a reasonable expectation that the individual will benefit from service by obtaining employment. Approximately 2,000 clients are involved in educational activities each year. These activities include training for vocations, studying for college degrees, on-the-job training, business school and other training. Much staff time is necessarily devoted to clients who may need

1983 Enrollment in Adult Education Programs Offered by Local Education Agencies

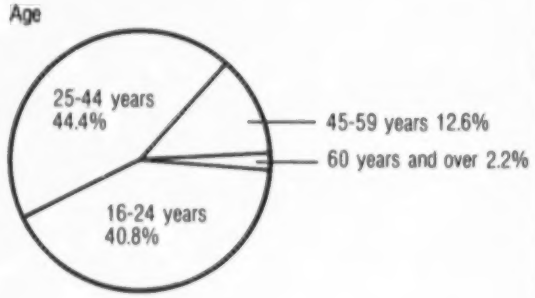
Mandated Programs		41,064
Basic Skills	7,333	
Citizenship	794	
English for Limited English Proficient	12,951	
High School Completion	19,986	
Nonmandated Programs		79,989
Business and Commercial/ Vocational-Technical	20,739	
Classes for Older Adults and Special Groups	4,909	
Crafts	9,536	
Health and Safety	10,801	
Home Economics[1]	11,876	
Noncredit Academic[2]	10,881	
Recreation, Sports Instruction	4,642	
Other[3]	6,605	
TOTAL		121,053

[1]Clothing, food, home purchasing, furnishing, management
[2]Communication skills, foreign languages, literature and philosophy, mathematics, music and art, science, social sciences
[3]Income tax and law, investments, parenting, and other courses

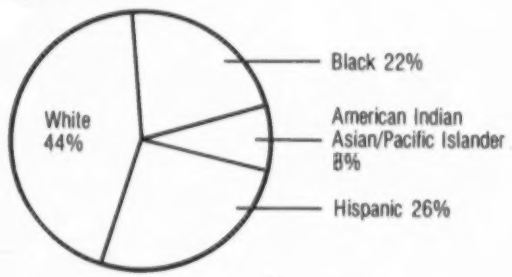
Source: CT Department of Education

Enrollment in Mandated Adult Education Programs
Total Number 1983: 41,064

Age

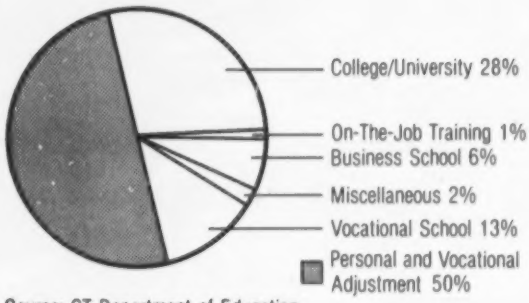


Race



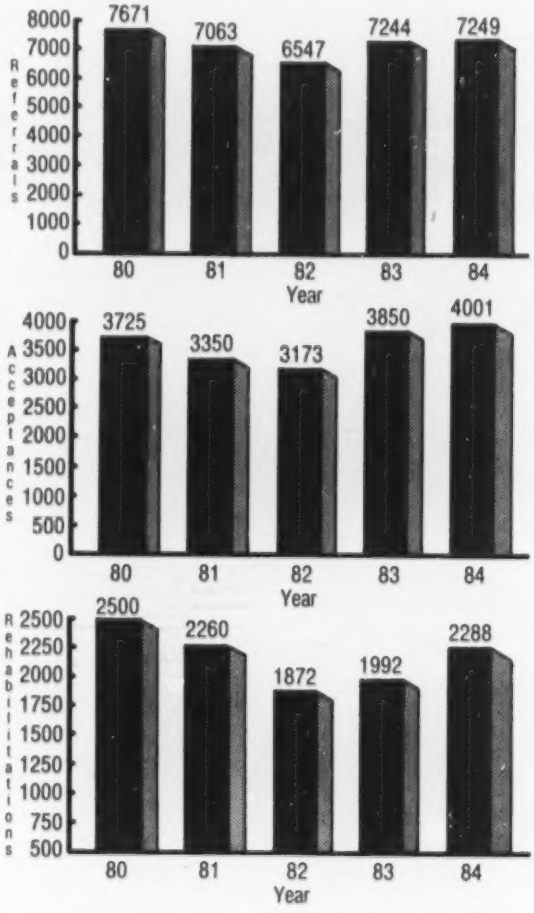
Source: CT Department of Education

Educational Services for Clients of the Division of Vocational Rehabilitation
Total Number: 1,840



Source: CT Department of Education

Number of Clients Referred to, Accepted and Rehabilitated by the Division of Vocational Rehabilitation 1980-1984



Source: CT Department of Education

services other than training. They may have a marketable skill but need a modified work environment, an appropriate means of transportation or other services in order to function independently.

Funding for the division is largely federal. The dip in the caseload in 1982, which the graph shows, was due to a change in the reimbursement system from advance funding to a case-by-case reimbursement system.

During the past year, the division participated in a cooperative effort with the New England Association of Business, Industry, and Rehabilitation and the Developmental Disabilities Council. The goal for the first year is to place ten severely disabled clients into competitive employment.

Recently a privately funded computer programming training course for the severely disabled has also been initiated. Business Information Processing Education for the Disabled is funded and managed by more than 30 Fortune 500 corporations which have joined with the division to create a unique learning environment. As of this writing 18 clients have graduated from the program and 15 of them have found employment with starting salaries averaging $18,000.

Learners With Special Needs

The state's school systems currently serve 76,000 young people, through age 21, in programs for learners with special needs. While some of these young learners are in special education facilities, the majority attend the regular public schools which provide them with the special help they need to realize their potential. Their vision, hearing or speech may be impaired, they may be mentally retarded or have learning disabilities or other impairments that make them exceptional. The number of children three to five years of age receiving special education services has increased 29 percent since 1978-79 and more than 3,500 are now being served. Pregnancy is another condition that makes students eligible for special education; three hundred pregnant teenagers were served last year.

As with other program areas, the Department is searching for innovative curriculum in special education. Projects recently funded include those to

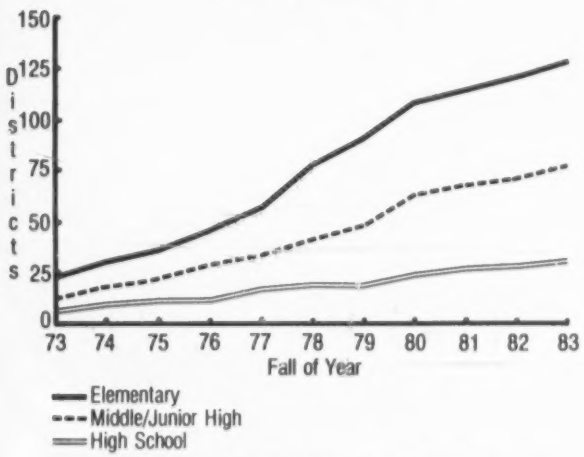
- field test and disseminate a system for evaluating program effectiveness in educating handicapped children;
- investigate and report on the adaptation of computers to aid the education of multihandicapped students, and
- develop a system to make immediately available to districts the latest research on the education of handicapped students.

Connecticut is the first state to develop and implement a school-based child health service for handicapped students. Through an interagency agreement, the State Department of Income Maintenance reimburses school

districts for health services delivered to special education students who qualify for Medicaid. The program, instituted in 1984, assures that services to handicapped students will continue uninterrupted. In addition, it partially relieves the fiscal burden on school districts providing such resources and, from the statewide perspective, takes better advantage of available federal funding. The Capitol Region Education Council (CREC), one of the state's six regional educational service centers, which are major resources to the Department of Education, is assisting with fiscal management for the project.

More than 10,000 of the students with special needs have been identified as gifted and talented, an increase of about one thousand from the previous year. Programs for these students, while eligible for an increased rate of funding, are not mandatory. No school district in the state has a program for gifted and talented students that runs all the way from kindergarten through grade 12.

Public School Districts Offering Programs for Gifted and Talented



Of the state's 165 school districts, 158 have elementary schools, 125 have middle/junior high schools and 117 have high schools

Source: CT Department of Education

The findings and conclusions of a recent study were endorsed by the State Board of Education and led to the Board's recommendation to the General Assembly that legislation be enacted to mandate programs and services for both academically gifted and creatively talented students in grades K through 12, beginning in the 1988-89 school year. This proposal will be considered by the 1985 General Assembly.

The Department is encouraging regional programs to meet the needs of pupils with artistic ability. Recently its funding made it possible for the Capitol Region Education Council of West Hartford to purchase, renovate and equip a regional facility, now the Greater Hartford Academy for the Performing Arts, to serve high school pupils with demonstrated or potential ability in the performing arts. The Academy will go into operation in late January with 70 pupils from 20 school districts in the Hartford area, plus seven extra students who have agreed to pay their own tuition.

One focus of Department activity must necessarily be on those areas of endeavor that individual school districts cannot undertake alone. The school-based child health service program mentioned previously is one such statewide endeavor. Basic research is another function that is more reasonably undertaken on a larger scale than by one district. With funding from the State Department of Education, the pediatric unit of the Yale University School of Medicine is conducting research to develop and test diagnostic instruments and procedures which will assist local school districts in the early identification of young children who are at risk of developing learning disabilities. A successful outcome will make possible significant educational advances in all school districts.

The quality and availability of special education instruction has increased greatly since the state mandate for such programs was passed in 1967. An individual student's program, however, may sometimes be the subject of concern. When the parent(s) or guardian(s) of a student disagrees with a special education evaluation, program or placement for their child, they may make a request for a hearing before a state special education hearing officer. The number of these hearings has dropped from a high of 101 in 1981 to about 38 in 1984. One reason is that Connecticut law provides mediation as an optional process for resolving disagreements. Mediation is a voluntary procedure which provides an opportunity for both sides to reach a satisfactory resolution to a dispute. Mediation has proven successful in about 75 percent of the cases.

Bilingual Education

Bilingual programs must be offered in schools with at least 20 pupils whose primary language is not English and who have demonstrated limited English proficiency. In 1983 nearly 10,000 students were eligible for bilingual programs; more than 90 percent of them were Spanish speaking. However, the languages of bilingual education change as our population changes. Only since 1980 have there been sufficient numbers eligible to warrant programs in Laotian, Cambodian and Vietnamese; in 1983, there were 429 such students. The number of students eligible for programs in Greek dropped from 66 in 1979-80 to zero in 1983; the Haitian and Creole programs have been discontinued.

Compensatory Education

Compensatory education programs benefit low-achieving children in local school districts, including children of migratory workers, and institutionalized neglected and delinquent children.

Although the total enrollment of about 43,900 in 1982-83 reached an all-time low due to federal cutbacks, the 7.7 percent of total public and nonpublic students was

still higher than in 1972-77, and turned upward again in 1983-84 to nearly 51,000.

To serve the needs of students attending the local public schools, the Department of Education administers federal funds made available by the Education Consolidation and Improvement Act and state funds provided by the Education Evaluation and Remedial Assistance Act. Approximately $40 million in state and federal compensatory education grants go to school districts. These funds are used primarily for supplementary programs in remedial mathematics, reading and language arts.

Enrollment in Compensatory Education Programs

	Public		Nonpublic		Total	
Year	Number	Percent	Number	Percent	Number	Percent of Total
1983-84	48,399	10.2	2,560	3.2	50,999	9.2
1982-83*	41,457	8.4	2,464	3.0	43,921	7.7
1981-82	43,694	8.5	2,848	3.2	46,542	7.8
1980-81	55,730	10.4	3,960	4.6	59,690	9.6
1979-80	55,526	10.0	4,643	5.4	60,169	9.4
1978-79	54,938	9.5	4,257	5.0	59,195	8.9
1977-78	51,563	8.5	3,893	4.5	55,456	8.0
1976-77	47,608	7.6	3,774	4.3	51,382	7.2
1975-76	47,261	7.4	3,865	4.4	51,126	7.0
1974-75	46,341	7.1	4,583	5.2	50,924	6.9
1973-74	44,415	6.8	3,951	4.4	48,366	6.5
1972-73	48,108	7.2	4,084	4.3	52,192	6.9

*Estimated

Source: CT Department of Education

In 1983-84 institutions serving neglected and delinquent children received approximately $800,000 for programs in institutional schools, including programs for 1,008 young adults under age 21 in correctional institutions.

Programs with a Special Purpose

The objective of the Department's special purpose programs, like the services for students with special needs, is to enhance learning opportunities for all students. Programs focus on increasing school effectiveness; achieving racial balance and sex equity; preparing displaced homemakers to enter the job market; improving student nutrition; and keeping in touch with the state's students through the Student Advisory Council.

- **School effectiveness.** The School Effectiveness Project was initiated by the Department to assist schools in improving student basic skills achievement, particularly the performance of low-income students. Project staff guide participating schools through an assessment and planning process and provide follow-up as schools implement specific plans for improvement. Schools' goals relate to those aspects of the school environment which research indicates are closely associated with learning. Among the contributing factors are:

. . .a safe and orderly environment conducive to teaching and learning;

. . .a clear school mission that guides the instructional program;

. . .the opportunity to learn and a high level of time-on-task for all students;

. . .frequent monitoring of student progress by teachers and principal;

. . .parental support of and involvement with the school's instructional program.

The school administration's approach to attendance, homework and promotion is also a factor in school effectiveness. "An Act Concerning Policies To Support Learning," adopted by the Connecticut General Assembly in 1984 requires all districts to have policies concerning attendance, homework, promotion and retention in place

Students Eligible for State-Funded Bilingual Education Programs*

Language	1977	1978	1979	1980	1981	1982	1983
Albanian	0	0	21	25	0	0	0
Cambodian	0	0	0	0	66	123	166
Greek	43	40	66	20	22	0	0
Haitian/Creole	0	0	0	0	0	24	0
Italian	183	210	54	109	50	64	40
Laotian	0	0	33	72	174	209	141
Polish	53	66	35	36	50	44	50
Portuguese	428	500	480	455	446	336	286
Spanish	9,698	10,826	9,328	8,836	8,595	8,864	8,990
Vietnamese	0	0	0	47	90	163	122
TOTAL	10,405	11,642	10,017	9,600	9,493	9,827	9,795

*Bilingual programs serve students in schools with at least 20 pupils who speak a particular language and who have demonstrated limited English proficiency. Eligible students are served in the academic year after they are identified.

Source: CT Department of Education

by July 1985. The law also directs the State Department of Education to make guidelines and model policies available to local and regional boards of education. The Department's publication *Attendance, Homework, Promotion and Retention*, to be distributed in February, highlights successful policies currently followed in several Connecticut school districts.

- **Racial balance/integrated education.** This program's purpose is to help local school districts comply with Connecticut's racial imbalance law. The regulations state: "Any school in which the proportion for the school falls outside of a range from 25 percentage points less to 25 percentage points more than the comparable proportion for the school district, shall be determined to be racially imbalanced."

  The statute authorizes the State Board of Education to require any school district with one or more racially imbalanced schools to submit a comprehensive plan to correct the imbalance. At present five districts—Hartford, New Haven, Stratford, Waterbury and West Haven—have schools identified as racially imbalanced, although in the past year Hartford and New Haven each brought three schools into compliance and the Board approved the Stratford school district's plan to reduce racial imbalance.

  During the 1983-84 school year the Commissioner established an advisory committee to study the state's racial imbalance laws and regulations, with particular reference to their application to urban districts with a high percentage of minority children. The committee has been gathering information concerning laws and regulations in other states and developing its concepts of what will work best in Connecticut.

- **National origin desegregation.** The Department helps local school districts identify and assess limited English proficient (LEP) students and provide for their education. Other activities include providing training for bilingual coordinators, gathering and disseminating research materials related to bilingual education, and developing an English for Speakers of Other Languages (ESOL) curriculum guide.
- **Sex equity.** The principal vehicles through which the Department works to achieve sex equity in educational programs are conferences and training sessions for teachers. In 1983-84, 210 teachers from local education agencies, colleges and other organizations attended three training conferences, sponsored by the Department in cooperation with the U.S. Office for Civil Rights and Connecticut women's organizations, on sexual harassment. Three-day workshops at Regional Resource Centers for teachers in grades 2 through 6 encouraged girls' participation in mathematics and science. During 1984-85 the focus shifted to grades 4 through 8.

  Displaced homemakers have been identified within the last seven years as a group critically in need of vocational education and counseling. They are women who have spent their adult lives working in the home, dependent upon another's income and suddenly, because of death or divorce, find themselves without any means of support. In 1979, there were 64,000 displaced homemakers in Connecticut and the number has risen since then. For six years, the Department has funded displaced homemaker programs which offer education and training as well as special courses on how to seek employment.

  In 1983-84, eight programs throughout the state served 363 participants. The cost was approximately $450 per person. Thirty-four percent of those completing their programs continued their education or went on for further job skill training and an additional 35 percent found employment.

- **Child nutrition.** To be alert and receptive to learning, children must have adequate and nutritious food. The Department of Education assists both public and nonpublic schools through the National School Lunch, School Breakfast, Special Milk, Child Care Food, Summer Food Service, and Nutrition Education and Training programs. Activities focus on the administration of all food service programs, training of food service personnel in program management, and assistance in nutrition education.

  In 1983-84 National School Lunch, the largest program, served over 36 million lunches or 208,000 per day. Some facts about this program:

  .. forty percent of public school students participated;

Participation in Child Nutrition Programs

Average Daily Number of Students

	Lunch				Breakfast			Milk	
Fiscal Year	Paid	Reduced Price	Free	Total	Paid	Reduced Price	Free	Paid	Free
1983-84	121,261	13,322	73,710	208,293	743	95	6,613	23,996	2,875
1982-83	117,706	13,817	74,645	206,168	649	86	6,836	26,243	2,555
1981-82	110,548	15,388	75,991	203,420	647	116	5,161	26,824	2,848
1980-81	110,398	16,871	71,775	199,044	795	133	4,937	29,791	3,319
1979-80	151,741	21,813	89,286	262,840	4,460	295	5,714	178,709	15,893
1978-79	170,308	21,964	87,527	279,799	3,487	271	3,604	213,873	17,729

Source: CT Department of Education

- charges vary from no cost to $1.10 per lunch, depending on a family's ability to pay, and
- schools receive government commodities.

Ninety percent of the revenues supporting the school lunch program come from student payments, federal and state reimbursements. Local district contributions and government commodities make up the balance.

- **State Student Advisory Council on Education.** Started in 1981, the council gives students a voice in educational planning. It also keeps educators and legislators in touch with the thinking of high school students. In 1983-84 the council, which is comprised of 27 student representatives, provided the Department of Education with reactions to the issues raised in *Connecticut's Challenge*. The group is currently working with Department staff to produce a pamphlet on student rights and responsibilities.

Professional Development

To carry on all the academic and support functions expected of them, teachers must be highly motivated and competent. To help them maintain a high level of performance, the Department of Education is stepping up its allocation of resources and staff to professional development programs. The programs address the various stages of a professional teaching career from the time a person is initially attracted to teaching, through the formal preparatory period including certification, to the time one begins teaching, and continuing to the final stages of a teacher's career.

The Department's professional development programs for elementary and secondary school staff (see also Section 1, Meeting the Challenge) are the responsibility of the Division of Curriculum and Professional Development. They are part of a larger initiative related to the teaching profession, which includes the Board's advocacy of higher standards for teacher preparation and certification, and higher salaries for teachers.

To offer quality continuing education, the Department established The Institute for Teaching and Learning in 1984. The Institute offered 24 one- to two-week in-service training programs to approximately 600 of the more than 3,000 teachers who applied to the program. The program focused on early childhood; writing; basic skills teaching in reading, mathematics and science; and supervision. The State Board of Education requested $4.8 million for professional development in its 1985-86 budget, an increase of $4.3 million from 1984-85. During the 1985-86 school year, $3.6 million will be used to expand The Institute's program to serve 7,000 teachers and $200,000 will fund a program for 400 administrators. Also, $500,000 will provide minigrants to school districts to support local professional development activities and to serve as an incentive for districts to submit their five-year plans earlier than 1986.

Awards and Recognition

No state can claim to truly support teaching and learning unless it has a program to recognize excellence. Connecticut's students, teachers and schools receive a number of state and national awards each year, awards which they earn through outstanding performance.

- **Teacher of the Year.** The best known teacher-recognition program is both state and national in scope. Since Connecticut began participating in the Teacher of the Year program in 1979, the program's popularity and the number of schools participating have grown steadily. Seventy-three districts, including the state's vocational-technical schools, nominated teachers in 1984, compared to 11 districts in the program's first year. Connecticut's choice has several times been a finalist in the national competition and in 1983, LeRoy E. Hay, an English teacher at Manchester High School, Manchester, was named National Teacher of the Year. In 1981 Shirley Gillis, a kindergarten teacher at Harbor School in New London, was named one of four finalists in the national

Outstanding in Their Fields

The Department of Education is proud not only to recognize schools and teachers who are doing an outstanding job but also Department staff who get cited by others for their outstanding achievements. Staff members who recently got favorable mention are:

Lorraine Aronson, Deputy Commissioner, the 1984 Young Public Administrator Award, Connecticut Chapter, American Society for Public Administrators

Marilyn A. Campbell, Director, Division of Vocational Rehabilitation, honored by the Connecticut Historical Society's traveling exhibition "Black Women of Connecticut: Achievements Against the Odds"

Ronald DeGregory, Division of Vocational, Technical and Adult Education, outstanding service award from the Policy and Planning Committee, Marketing and Distributive Education Association, American Vocation Association

Richard S. Krissinger, Division of Management and Budget, reappointed to National Committee on Architecture of Education, American Institute of Architects

David Mordavsky, Division of Vocational, Technical and Adult Education, honored by the American Council of Industrial Arts Supervisors as Outstanding State Supervisor of Industrial Arts

Angelo Tedesco, Director, Division of Vocational, Technical and Adult Education, distinguished service award from the National Network for Curriculum Coordination in Vocational-Technical Education

competition after she was named Connecticut Teacher of the Year. Thomas Sullivan, a social studies teacher at John Winthrop High School in Deep River, is Connecticut's 1985 Teacher of the Year.

The State Department of Education is proposing to the 1985 legislative session several bills that would create other programs designed to recognize and reward outstanding teachers.

- **Outstanding Students.** Many Connecticut students received local and regional recognition and awards for their achievements. We cite here four students who attracted national attention.

Kim Gutschow of New Canaan High School and Eric Janney of Fitch Senior High School in Groton were among 102 high school seniors nationwide named 1984 Century III Leaders by the National Association of Secondary Schools. Century III Leaders is a scholarship program designed to help develop student leadership skills.

Wilson Korth, a graduate of the Housatonic Valley High School vocational agricultural program, was honored as the top individual in dairy proficiency in the nation by the National Future Farmers of America.

Emma Redmond, a sophomore at Greenwich Academy, designed an experiment which was selected by NASA in June 1984 to be performed on a future space shuttle flight. Redmond's project, which studies how bones heal in space, was one of ten picked from 3,000 proposals submitted by students nationwide. She was the only New England student whose project was chosen.

Daniel Tyler's slogan and poster design, "Drunk Driving is Breaking America's Heart," was the National Award Winner in a contest cosponsored by the Distributive Education Clubs of America, the Outdoor Advertising Association of America and the U.S. Department of Transportation. The Enfield High School student's design will appear on 2,500 billboards throughout the country between December 1984 and March 1985.

- **Schools and Programs.** The schools and programs described here were selected as representative of Connecticut's best.

The food service and management program at Enrico Fermi High School, Enfield, was honored as the Most Outstanding Vocational Program in New England by the U.S. Department of Education. The program, known as Cafe Rendezvous, is a full-course gourmet restaurant run by students as part of their vocational training.

Lyman Memorial High School in Lebanon was chosen by the U.S. Department of Education in 1984 as the only school in the East to test a new farm-business course. The course is designed to sharpen the management skills of farmers and farm workers.

Ellington High School was honored by Phi Delta Kappa, an education fraternity, and by the Principals Newsletter of North Carolina for its substitute teacher program. The program uses faculty members to cover classes for absent teachers, while full-time paraprofessionals cover "supervisory duties" in study halls, corridors, and in-school suspension halls. The program has generated over 150 inquiries nationwide.

Four junior high schools were among 202 schools nationwide chosen by the U.S. Department of Education's National Secondary School Recognition Program.

Amity Regional Junior High School, Bethany
Flood Intermediate School, Stratford
Conte Arts Magnet School, New Haven
East Ridge Junior High School, Ridgefield

On the National Scene

Three Department of Education staff members will hold top offices in national professional organizations in 1985. They are:

Marjorie Bradley, chair, National Council of States on Inservice Education (NCSIE)

Pascal D. Forgione, chair, National Panel of the National Institute of Education Center on Student Testing, Evaluation and Standards

Robert Hale, president-elect, Association for Educational Communications and Technology

Also in a national role is:

Saul Sibirsky, selected by the U.S. Department of Education to provide leadership institutes for state education officers and others involved in job training for persons with limited English proficiency.

Back at the Connecticut Department of Education, Bradley and Hale are in the Division of Curriculum and Professional Development; Forgione is chief, Office of Research and Evaluation; and Sibirsky is a bilingual education consultant with the Division of Vocational, Technical and Adult Education.

- **Vocational Improvement Practices.** The following projects were among ten programs selected in 1984 as exemplary by an independent review committee with representatives from local school districts, regional vocational-technical schools, higher education and the Vocational Education Association of Connecticut.

  The industrial arts program at Kolbe Alternative School, Bridgeport, trains emotionally disturbed adolescents in vocational skills, enabling them to obtain entry-level employment.

  In Waterbury public schools, the Cooperative Project Eyelet Industry Program (COPEI) prepares minority and disadvantaged youths for skilled employment in the eyelet trade through cooperative work education.

  The Exploratory Electronic Communications program in the Bethel public school system acquaints students with the world of electronics and its applications; it also provides participants with all the skills and information needed to qualify for a Federal Communications Commission (FCC) Novice Class radio license.

  The Carpentry-Pride and Prefab for Cash program in the West Haven public school system develops entry-level skills in the carpentry-building trades. Students construct and market high quality, reasonably priced small buildings.

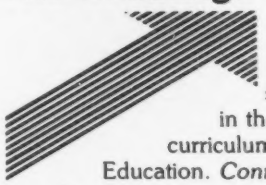
- **Exemplary Special Education Programs.** Connecticut, which was a leader in special education long before it was federally mandated, has many exemplary programs. While many school districts in the state have programs similar to those listed, the following examples were among those recognized by the Connecticut Association of Secondary Schools.

  The Learning Center at Silas Deane Junior High School, Wethersfield, provides individualized basic education for students with learning disabilities. The program, which has operated within the Wethersfield school system for 15 years employs two full-time learning disabilities teachers.

  The Capitol Region Education Council (CREC) Hearing Impaired Program provides an educational program for hearing impaired students who in the past would not have been attending public school The program, sponsored by CREC, serves students in grades 7-9. Students are outfitted with hearing packs and teachers use wireless microphones.

  Special Education Resource Center at Litchfield Junior High School assigns students to a planning and placement team to work in the resource room for part of their school day. The student may use the room from one to 15 periods a week. Services include: monitor and support of regular academic classes; diagnostic and prescriptive programming for academic skills; communication with parents and classroom teacher; and educational diagnostic testing. The focus is on the student and his problems, not on categories or labels.

Meeting *The Challenge*



Programs that foster, support and improve learning in the public schools are the "core curriculum" of the State Department of Education. *Connecticut's Challenge* discussed the critical issues on the Department's agenda and proposed action. The document set the stage for change and generated activities to strengthen learning opportunities in Connecticut's schools in the years immediately ahead. Progress on a number of fronts during 1983-84 has positioned the Department to continue the directions begun and to embark on new ventures in line with the overall course adopted.

- **Raising educational standards.** Increasing statewide graduation requirements was an important first step in the improvement of standards but the issue is not closed. In 1983-84, the General Assembly acted to set a high school graduation requirement of 20 credits and to specify how those credits must be distributed. The Board's recommendation to increase the length of the daily class time from 40 to 45 minutes was not accepted by the legislature. Further recommendations from the Graduation and Course Requirement Advisory Panel are being forwarded to the Education Committee of the General Assembly for possible action in the 1985 session. The emphasis in these recommendations is on the distribution of courses to be required in grades 1-8, and a requirement that vocational education and foreign languages be offered to 7th and 8th grade students. The advisory panel is also discussing exit examinations as a possible requirement for high school graduation and the feasibility of granting a scholar's diploma for exceptional academic achievement.

  Other actions under consideration by the 1985 General Assembly that relate to higher educational standards include new certification requirements (see page 18, Quality Teaching), other proposals related to instructional mandated requirements and a number of requests for increased appropriations. For instance:

- **Longer school year for teachers.** Proposed legislation would extend the school year from 180 to 190 days for teachers, to help ensure that professional development and program preparation do not encroach upon classroom time. The amount of time students spend learning is a critical factor in achievement; providing additional time for teachers' activities would be a significant step in enhancing instructional time for students.

Interdistrict cooperative programs. The State Board of Education has requested $1 million for grants to encourage educational alliances among school districts. The focus of the grants will be to stimulate cooperative activities to benefit those districts most affected by declining enrollment, particularly at the high school level. The board hopes that, from this program,

some model approaches will emerge that can be used statewide. Such approaches may involve staff sharing, transporting students to centralized sites, or other types of collaboration in planning, scheduling, teaching, instructional technology, purchasing or other services.

Increase in grants to the regional educational service centers. The six RESCs are the backbone of cooperative efforts undertaken for educational purposes. They form a statewide network of service centers that can supply regional, cost-effective technical assistance, programs and services to meet the educational needs of students in local districts and to allow districts to maintain a desirable breadth of subject offerings in the face of declining enrollments. To permit greater use of the RESCs, the Board has requested a 23 percent increase over the 1984-85 appropriation.

.. **More dollars for curriculum development.** The Board's budget request for 1985-86 includes additional dollars for curriculum development and dissemination in language arts, mathematics and science.

Also at its meeting in December 1984 the Board of Education received a report of the Citizens' Committee on the Arts in Education and directed the commissioner to establish a statewide Arts Advisory Committee to keep him informed of developments in comprehensive arts programs and to assist schools in integrating the arts into their curriculums.

The Department's commitment to maintaining high quality curriculum and teaching is also evident in the recent reorganization, which created a new Bureau of Professional Development, devoted to teacher issues, and a Bureau of Curriculum. Together they comprise a separate Division of Curriculum and Professional Development, devoted to promoting excellence in education. As stated in *Connecticut's Challenge*, funds directed toward professional development and curriculum revision may be the best, surest and most cost-effective way to ensure student achievement.

- **Helping students achieve.** Ideally, each child would progress sufficiently within the standard time allotted to each grade or subject to make remedial services unnecessary. There will always be some children, however, for whom the standard classroom curriculum is not enough. For them, classroom instruction must be strengthened and augmented by a broader range of approaches to learning. The keys to good remedial education, as to all good instruction, are good teaching, good curriculum and staff development.

In its budget request for 1985-86, the State Board of Education asked that the funds for compensatory education be increased by $4 million over the current appropriation to $10.4 million. The grant will support innovative approaches to remedial instruction, as well as accommodate the increased number of children who may be identified by the state's new mastery testing program as needing extra help to fully master the basic skills.

The Basic Skills Committee has been meeting since June 1984 to define remedial assistance, review the many programs related to basic skills and remedial assistance and to develop a proposal for the best way to integrate successful remedial approaches into current programs. Several themes characterize the recommendations to be presented to the Board of Education in January 1985:

.. Effective basic skills instruction for all students helps to reduce the need for remedial instruction;

.. Effective planning for basic skills instruction would occur on three levels: district, school and classroom;

.. Professional development helps teachers improve instructional skills and helps administrators improve instructional leadership skills;

.. Evaluation procedures can help to improve the effectiveness of basic skills instruction.

Three approaches by which Connecticut hopes to foster the learning of basic skills are the Priority School District program (see page 15), Jobs for Connecticut Youth (JCY), and the proposed summer school program.

.. **Summer school.** For many students the traditional 180 days does not provide enough time to gain the skills to succeed in the following year. The State Board of Education 1985-86 budget request for a $3 million summer school incentive grant is intended to offer a supplemental educational program. The proposed program would focus on basic skills education for students in grades K through 8, although up to 25 percent of each grant award could be used for enrichment activities such as art or music.

Summer school provides an unparalleled opportunity to enhance services to students most in need by offering continuity and reinforcement of the school year program. It also offers the opportunity to address students' need on a more individualized basis, as teachers are not constrained by a school year curriculum geared to the mainstream student. The potential for innovation is high, including the possibility of coordinating some programs with summer professional development activities. Without some state aid, however, it is unlikely that most districts will be able to undertake such programs.

.. **Priority school districts.** The Board has requested funds to expand from ten to 15 priority school districts. In addition, it will continue to target other resources to these districts by giving them special consideration for participation in programs such as school effectiveness and The Institute for Teaching and Learning.

.. **Jobs for Connecticut Youth.** Some students need greater incentives to stay in school; for them, it is important to see the relationship between school and work. JCY addresses the academic needs of disadvantaged students in the context of the world of work. The Board's budget request includes funds to expand the number of sites so that JCY programs will be accessible statewide.

- **Targeting programs to specific populations.** Often the best way to provide equal educational opportunities is to adapt programs to the distinctive characteristics and learning styles of certain groups of students. Very young children, young parents, and the gifted and talented are among the groups with special needs.

.. **Early childhood.** A focal part of the Department's initiatives during the next year will be the fostering of early learning opportunities for all children. Two study committees have been seeking to identify the best ways for Connecticut to provide such experiences (see pages 15-16) and staff members look forward to working with other agencies involved in serving the youngest members of the population. The Department is undertaking a major effort to collect information concerning program offerings statewide in this rapidly changing area.

.. **Young parents.** This population is getting increasing attention from the Department. Adolescent parents drop out of school at an alarming rate; both they and their children are at risk educationally and economically. A major contributing factor to the high dropout rate is lack of day care. If it were available at the schools, parents might come back to school. Added benefits of in-school day care would be opportunities for high school students interested in careers in child care to work in a day-care setting and a greatly increased potential for early intervention with babies in danger of developing learning difficulties. The Department has requested funds to establish a small grant program to encourage districts to develop programs for teenage parents which include in-school day-care components.

.. **Gifted and talented.** Another special needs group—the gifted and talented—require greater challenges to maintain their interest in school. In addition to the proposal for the legislative mandate for programs for such students, the Department has requested $50,000 (to be matched by private funds) to conduct a study of the need, costs, possible funding sources, and feasibility of establishing one or two special schools such as a Connecticut School for Music and the Arts or for Mathematics and the Sciences.

- **Delivery of vocational education.** Vocational and career programs and services in Connecticut are provided by the comprehensive high schools, the regional vocational-technical schools, the private postsecondary occupational schools licensed by the State Department of Education, and by institutions of higher education. In the Department reorganization, to become effective in February 1985, the Division of Vocational-Technical Schools and the Division of Vocational, Career and Adult Education are being merged into one division, to be called the Division of Vocational, Technical and Adult Education. The director will be responsible for administering all vocational and adult education programs in the state. This consolidation is expected to have a positive impact on the delivery of vocational and adult education. Programs in high schools and vocational-technical schools for both secondary and adult populations will be coordinated and duplication of effort can be avoided. Better use of facilities to meet regional needs at lower costs should result.

  The Vocational Education Study Committee is exploring a number of issues related to the delivery of vocational education services. These issues include governance, service delivery and the clientele to be served. The committee is reviewing the grade structure, organization and governance of the state's system of vocational-technical schools; the relationship of the vocational-technical schools to vocational programs provided in local high schools and institutions of higher education; and the linkages that exist between the public and private sectors, between secondary and postsecondary programs, and between academic and vocational education. The committee is scheduled to report to the State Board of Education in April with recommendations to guide vocational education into the 1990s.

- **Opportunities for adults.** Connecticut must devote more resources to increasing the literacy, basic skills and retraining of its adult population. The median age continues to rise and is projected to reach 38 by the year 2000. The sharpest decrease is in the 16-to-24-year-old segment of the population. Many of Connecticut's unemployed do not have the skills demanded by today's and tomorrow's workplace and many adults need appropriate vocational training or retraining. Of greater concern is the fact that many adults do not have the basic skills to profit from employment training. The Department has requested a 72 percent increase over last year's appropriation to $3.4 million for adult education in 1985-86.

  The Adult Education Study Committee, which will report to the Board in April 1985, has identified five major goals critical to successful adult education programming in Connecticut.

.. Organize adult education services within the Department of Education so that programming will be effective and accountability will be assigned.

.. Increase participation in basic education programs to increase adult literacy and high school completion.

.. Provide high quality and accessible programs to target populations through increased cooperation with local education leaders.

.. Increase employers' competitive advantage by developing programs jointly with private industry and the various agencies of the State of Connecticut.

.. Allocate sufficient funds and pursue new funding sources to support adult education.

  The Committee will recommend ways to provide adult education services through the year 2000. With regard

to other Department activities, 1985-86 will be the first year of full implementation of a new adult education program evaluation system, an important component for any program that is expected to expand significantly in the next few years.

- **Monitoring and Evaluation.** A unique responsibility of the Department is to oversee programs statewide to ensure that the State Board of Education meets its statutory responsibilities.

  The Department is greatly expanding its program evaluation activities and has instituted a coordinated monitoring system to relieve districts of the burden of several separate site visits by Department monitoring teams at different times.

  Department personnel have previously followed separate schedules in looking at programs separately—bilingual, Chapter 1, Chapter 2, special education, adult education, etc. The plan now is for staff members to go to a school district together at the beginning of a monitoring period of specified length, which has been scheduled in advance with the superintendent; look at programs and records over this period, and then together discuss the findings with the superintendent. Corrective actions would also be taken cooperatively.

  This is an attempt to minimize what can be an intrusive and time-consuming process for districts. The new monitoring approach, initiated last year, was expanded this year to 20 districts. The Department's ability to expand this program to all districts is currently being assessed.

  The monitoring function is important for districts; it gives an "outside" look at their programs and services and assures Connecticut taxpayers that their dollars are supporting programs of excellence and equity.

- **Recognizing Excellence.** While the Department has initiated and administered vocational improvement and special education promising practices programs to identify model projects, it has no organized program to recognize and reward these outstanding local programs, which make up the major portion of the curriculum of most districts. The Board has requested a modest $20,000 to organize a program to recognize exemplary schools and programs in mathematics, science, social studies and language arts, and to disseminate information about the model programs.

While funding alone cannot guarantee quality programs, adequacy and equity of funding are fundamental to the provision of programs and access to them. Section 4, which follows, summarizes the costs—the revenues and expenditures that make Connecticut's programs possible—and discusses some problems of equitable distribution of resources among the public schools, as addressed in the case of Horton vs Meskill.

Finance

The programs of the Connecticut State Department of Education are supported primarily by state and federal funds which together are expected to amount to more than $900 million in 1985-86. The Department's budget based on this income provides a vehicle through which to work toward the goals of equity and excellence in education. It is the Department's responsibility to allocate the funds available to meet urgent needs, to raise standards and to equalize learning opportunities throughout the state.

Dollars for Education

In 1983-84, the Department's state and federal expenditures totaled $722.2 million, of which 85 percent was state and 15 percent was federal revenues. Six percent of the state General Fund appropriation supports the state's regional vocational-technical school system and 92 percent is passed along to the local towns and school districts in the form of grants. Two percent funds state services, leadership and management.

Federal funds, most of which are categorical grants for specific purposes, also supplement local funds raised through property taxes, still the major source of operating funds for the local public schools.

The total amount from all sources expended on elementary and secondary education by Connecticut school districts in 1983-84 was $1,735.2 million. In addition, another $223.5 million was spent directly by the state for such costs as the vocational-technical schools, costs of the Teachers' Retirement System, and the operation of the State Education Department, bringing the total expenditure for public elementary and secondary education to $1,958.7 million. This was an increase of 6.9 percent above the $1,832.4 million expended in 1982-83.

In 1983-84 Connecticut's total public expenditures, as calculated by the National Education Association, came to $3,636 per pupil, ranking the state sixth among all the states and 23 percent above the national average of $2,948. [Note: Reported per pupil costs vary according to the bases on which they are computed. Federal figures are based on efforts to equate the different accounting methods and categories used in the respective states.]

Despite Connecticut's above average total expenditure per pupil, and reflecting its high personal income per capita of $13,748 (see page 5), the state in 1983-84 ranked 43rd among the 50 states in personal income expended for current expenditures of public schools.

In relation to the federal and local shares of total expenditures, the state's contribution increased from 24.3 percent in 1978-79 to 31.4 percent in 1983-84, with cor-

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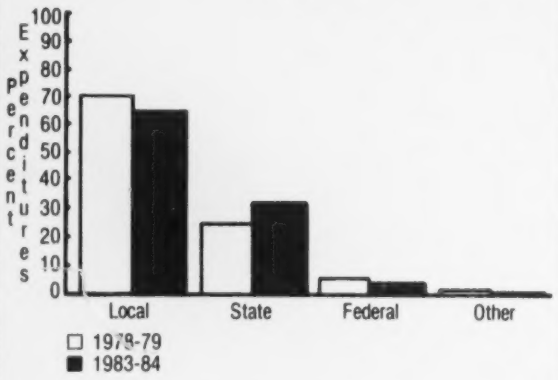
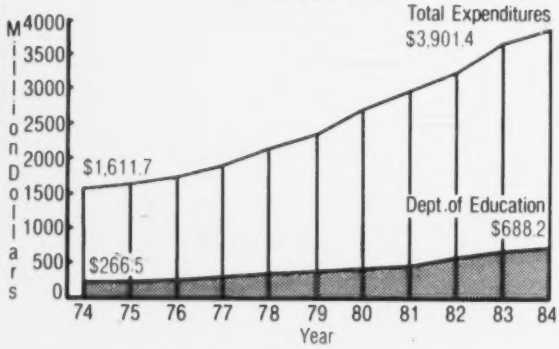
Local, State, and Federal Shares of School District Expenditures
1978-79 vs. 1983-84



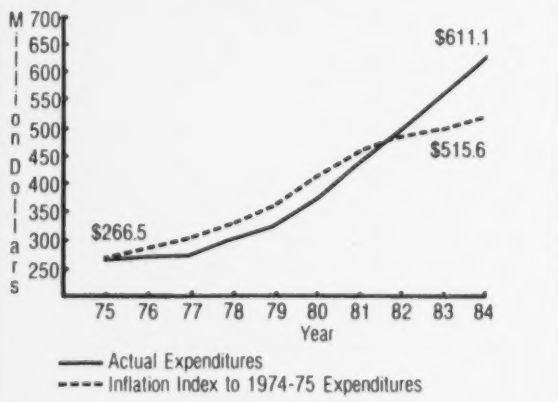
Source: CT Department of Education

State of Connecticut
General Fund Expenditures



Source: CT Department of Education

State Board of Education General Fund Expenditures
Adjusted for Inflation



Source: CT Department of Education

responding drops in both local and federal shares. As a proportion of total state General Fund expenditures, however, Connecticut's expenditures for elementary and secondary education have increased only one percentage point in the past decade, from 16.5 to 17.6 percent of the total. When indexed to inflation since 1974-75, the General Fund support for elementary and secondary education of $611.1 million in 1984-85 is equivalent to $515.6 in 1974-75 dollars, an increase of 93.5 percent.

In comparison with other states, Connecticut in 1983-84 ranks 40th among the 50 states in its contribution to state-local expenditures for education. The state share of education costs in 1983-84, as computed by the National Education Association, accounted for 40.2 percent of nonfederal expenditures. The national average state's share of such expenditures was 52.1 percent.

How Funds Are Used

The largest item in the Department of Education budget is the educational equalization grant to towns, based on the guaranteed tax base (GTB) formula. The State Board of Education requested a total General Fund appropriation of $800.6 million for 1985-86, of which $491.2 million is earmarked for distribution to the towns under the GTB formula. This grant, which attempts to equalize the capacity of towns to fund their schools, was scheduled to be fully funded in 1983-84. Full funding has not been reached; in 1984-85, the phase-in level is at 95 percent. The proposed educational equalization grant for 1985-86 is based upon full-funding plus the Board's new 50-50 phase-in schedule under which state and local shares of public school expenditures would be equalized over a four-year period.

How resources are allocated determines to a large extent where efforts will be greatest. In a 1983 publication, *Connecticut's Challenge: An Agenda for Educational Equity and Excellence*, the Commissioner and the State Board of Education proposed the directions for education in the '80s and emphasized those programs and activities which they believe will contribute most to improving school programs and learning opportunities for students. The 1985-86 budget request reflects these priorities. In it the Board and the Commissioner of Education moved aggressively

- to secure additional funds for new programs;
- to reallocate available funds to meet current and changing needs, and
- to target funds to support new initiatives set forth in the *Challenge*.

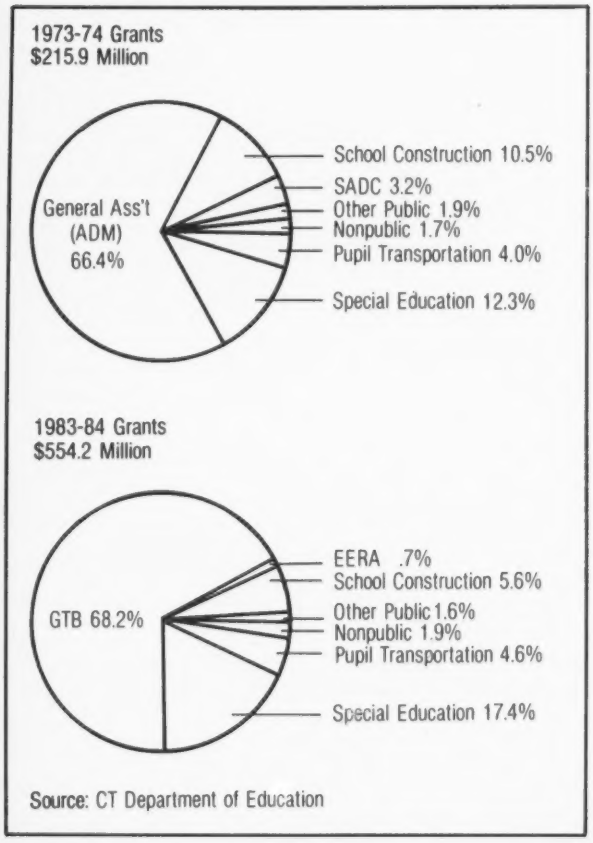
Grants to Towns

The $740 million that the state spent on elementary and secondary education in 1983-84 was 37.8 percent of the total public expenditures for this purpose and included expenditures for vocational-technical schools, Teachers' Retirement System and the operation of the State Education Department. The local share was 56.5 percent, the federal share was 5.4 percent, with 0.3 percent from other sources.

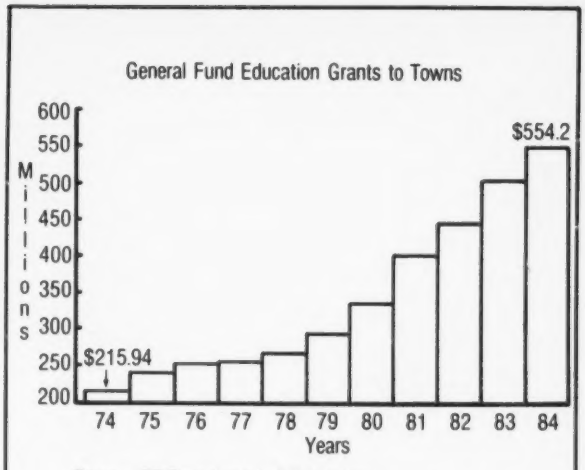
Connecticut General Fund grants to towns, through the Department of Education budget, rose from $215.9 million in 1973-74 to $554.2 million in 1983-84, an increase of 157 percent. During this same period the consumer price index increased 112 percent.

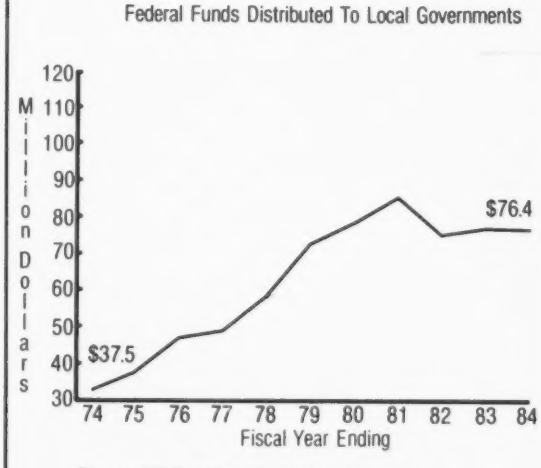
About 75 percent of the funds expended by local school districts and regional educational service centers goes for personnel and related costs. This percentage, according to data submitted to the Department of Education by local school districts, has decreased from 78 percent since 1975-76.

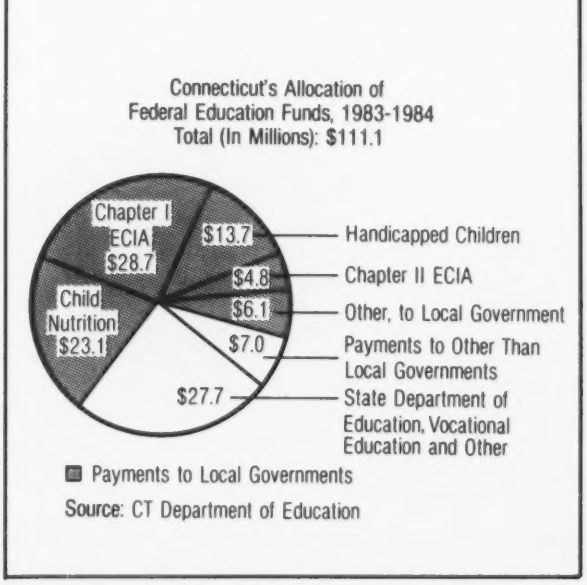
The number of small categorical grants decreased from nine to six between 1973-74 and 1983-84. In 1983-84, most grants—all of the large ones—are equalized on the basis of each district's ability to pay. None were equalized in 1973-74.



General aid to schools (the Average Daily Membership or ADM grant in 1973-74 and the Guaranteed Tax Base or GTB in 1983-84) was 66.4 percent of total grants in 1973-74 and 68.2 percent in 1983-84. In 1983-84 a greater percentage of the total state aid went to special education, pupil transportation and general aid than in 1973-74. A smaller percentage went to compensatory education and school construction. High school expenditures per pupil, exclusive of special education costs,





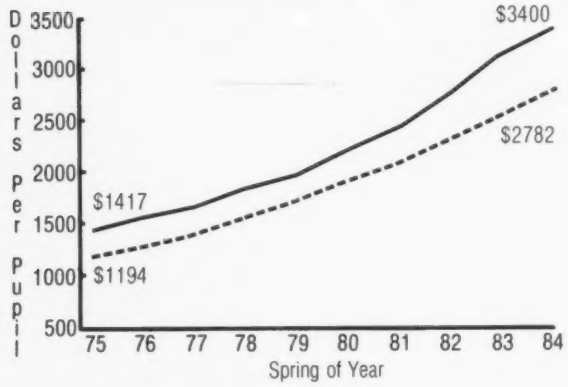


were 22 percent higher than expenditures per pupil in the grades below high school in 1983-84; in 1974-75 they were only 18.7 percent higher.

The relatively higher increase in per pupil high school costs results in part from the enrollment decline (see page 6). While the enrollment decline in elementary schools is nearing its end, the decline in high schools will continue until 1991, when enrollment statewide will be about 26 percent below its 1984 level. Unlike elementary schools, where the teaching staff can be reduced in proportion to enrollment so as to maintain the same average class size, high schools often must make a choice between allowing class size to decline, especially in specialized and advanced courses, or eliminating some courses altogether.

In the years between now and 1991, this trend will continue and will put severe pressures on per pupil costs, especially in small high schools. To help deal with this problem, the Department is encouraging cooperative programs among high schools and has requested funds for interdistrict cooperation to plan exemplary projects that will demonstrate the cost benefits to schools of shared programs.

Local Current Expenditures Per Pupil
(Does Not Include Special Education Costs)



Source: CT Department of Education

Disparities in Expenditures Among Connecticut Towns

Despite increased state aid to towns and local school districts, disparities in educational opportunities continue.

In 1976 the Horton vs Meskill decision of the Connecticu Supreme Court found the state's system of financing schools to be unconstitutional under the state constitution because it had established a system whereby the quality and quantity of educational services to pupils in the various towns of the state were primarily dependent upon town wealth. As a response to this decision the state adopted in 1978 the Guaranteed Tax Base (GTB) formula for providing general aid to Connecticut school districts in inverse proportion to their wealth, i.e., poorer

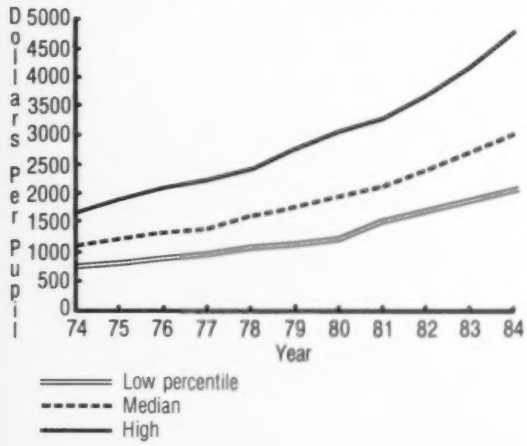
What Districts Buy
(In Millions of Dollars)

	1975-76		1979-80		1983-84	
	$	%	$	%	$	%
Certified Personnel	585.2	61.0	719.7	56.6	916.8	54.6
Noncertified Personnel	111.8	11.7	154.3	12.1	202.0	12.0
Employee Benefits	50.6	5.3	79.0	6.2	145.5	8.7
Professional-Technical Services	7.7	0.8	14.9	1.2	22.6	1.3
Subtotal	755.3	78.8	967.9	76.1	1,286.9	76.6
Property Services	34.9	3.6	50.6	4.0	75.5	4.5
Transportation and Travel	37.0	3.9	55.5	4.4	74.7	4.4
Tuition	39.4	4.1	58.6	4.6	84.0	5.0
Supplies and Materials	71.7	7.5	106.9	8.4	102.6	6.1
Capital Outlay	8.2	0.9	13.2	1.0	28.0	1.7
Other	12.5	1.2	19.0	1.5	28.5	1.7
TOTAL	$959.0		$1,271.7		$1,680.2	

Source: Data supplied to Department of Education by school districts and RESCs

districts receive more aid from the state than wealthier ones. In addition, the major grant programs whereby the state provides funds in support of transportation, school construction, adult and special education, are also now provided on an equalized basis, under formulas by which poor districts receive more aid from the state than wealthy ones.

CT Towns' Net Current Expenditures* per Pupil



*Total current expenditures less expenditures for transportation, adult education, health and welfare services for nonpublic pupils, tuition from nonresident pupils, capital expenditures, food service and student activities not supported by local taxes.

Source: CT Department of Education
CT Public Expenditure Council

Since the adoption of the GTB formula, however, substantial disparities in expenditures per pupil among Connecticut school districts have remained.

Variations Among Wealthy, Average and Poor School Districts* 1982-83

School Districts		Average Spent Per Pupil	Average School Tax Rate In Mills
Wealthiest	10 Percent	$3,579.	17.03
Middle	10 Percent	2,670.	23.76
Poorest	10 Percent	2,543.	31.01

* Data as computed for GTB formula.

The table indicates disparities in spending and tax rates in 1982-83 in the wealthiest, middle and poorest districts in the state and shows that, despite lower tax rates, wealthier districts were able to spend more per pupil than poorer ones. The relationships among wealth, tax effort, educational spending and program quality are extremely complex. However, it is clear that community wealth remains a prime determinant of the education students receive in this state's public schools.

The Horton vs Meskill case was reopened in 1983. Based on a recent ruling of the Supreme Court, more hearings will be held, partly to determine whether "the disparities are not so great as to be unconstitutional."

Regardless of the outcome of these court proceedings, the State Board of Education believes that expenditure disparities must be reduced in order to meet the goal of equal educational opportunity. The Board, through its own deliberations and in cooperation with the Educational Equity Study Committee, a group established by statute, hopes to find ways of bringing about greater equality of educational opportunity among Connecticut school districts.

The State Board of Education budget request for 1985-86 includes a recommendation that, over a four-year phase-in period, the state institute a plan to share the nonfederal expenditures of Connecticut school districts on a 50-50 basis, i.e. 50 percent of the total nonfederal expenditures for education statewide will be supported by the towns from local taxes and 50 percent by the state through the General Fund. The increased state funds made available through this 50-50 partnership program would be distributed on an equalized basis in accordance with the equalization formula.

Another important component in the attempt to reduce expenditure disparities is the Minimum Expenditure Requirement (MER). This was adopted at the same time as the GTB formula. However, because of the delayed phase-in of the GTB formula, the Minimum Expenditure Requirement (MER) will not be fully effective for most districts until 1985-86.

The legislature also has enabled certain school districts to spend less than their MER, based on a legislative provision for an "alternative MER." Both the State Board of Education and the Equity Committee have debated whether the alternative MER should be abolished and additional aid provided to districts that have insurmountable difficulties in meeting their MERs. An equalized aid formula alone cannot equalize program and service disparities among school districts unless provisions are made to assure that all districts use their state aid to meet at least the minimum expenditure standards established by the state.

Salary Disparities

Since salaries make up the greater part of all school budgets there is a direct relationship between disparities in salaries and disparities in expenditures per pupil. The following table illustrates the spread in salaries between the average salary in the lowest-paying school district and in the highest.

Mean Salaries, Teachers and Professional Support Staff, 1983-84

Status	Average Salary	Percent Above Lowest-Paying
Highest-Paying District	$31,436	110.2
Median District	21,434	43.3
Lowest-Paying District	14,954	---

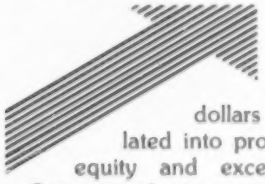
If salary disparities could be reduced, not only would expenditure disparities be reduced, but more importantly, there would also be a tendency to distribute teaching talent more equitably among the schools of the state.

The Governor's Commission on Equity and Excellence in Education is well aware of this relationship. It is considering ways to design a package of recommendations that will:

- attract and retain high quality teachers;
- encourage high quality teaching performance;
- ensure an equitable distribution of high quality teachers and teaching performance;
- preserve local control of the schools.

Its report will be presented to Governor William A. O'Neill in June 1985.

Meeting *The Challenge*



Equity cannot be achieved by dollars alone. Dollars must be translated into programs and services that offer equity and excellence in education to all Connecticut's citizens.

The Department's budget is its plan of action. The way in which funds are allocated mirrors the priorities of the State Board of Education. Requests for new funding in 1985-86 for summer school incentive grants, an interdistrict cooperative program and a young parents program reflect the Board's concern for special situations in which the needs of students are not met by the traditional school programs. Proposals to increase funding for grants to local school districts, for adult education, compensatory education, and priority school districts illustrate the ways in which funds will be used to improve programs and equalize learning opportunities statewide.

Examples of specific objectives that are directly linked to funding are:

- implementation by 1988-89 of a 50-50 split between state and local support of total statewide expenditures, exclusive of federally funded programs and services;
- adoption of a fair and adequate salary scale for teachers, with a starting salary high enough to attract new entrants to the teaching profession;
- maintenance of high teaching and learning standards through improved teacher preparation programs, certification regulations, student mastery testing, continuing professional development for teachers and administrators, and programs to recognize exemplary schools, programs and outstanding teachers;
- adequate support for students identified as having special needs in order to succeed in school and for programs with a special purpose related to the improvement of learning;
- further automation of the Department's administrative and managerial functions for greater efficiency.

These goals and objectives will not be achieved solely through the commitment of Connecticut's educational leaders, for public education is a shared enterprise. Its benefits--and responsibility for its support--belong to each of the state's citizens as individuals and in their many roles as elected representatives, taxpayers, employers and employees, volunteers, parents and residents of Connecticut. Their influence--your influence--will be a deciding factor in the direction taken during the '80s by elementary and secondary education in the state.

As the Commissioner of Education points out in his introduction to this report, to care enough to participate in any undertaking, one must know something about it. This report has attempted to give a broad picture of the condition of education in Connecticut in 1983-84, with sufficient detail to allow readers to sense what is good, what needs improving, what the major challenges are and how the State Board of Education and the Department of Education propose to meet those challenges in 1985 and after. Implicit in their advocacy of excellence and equity is a commitment to keeping the issue of concern for public education in the forefront of the public's awareness.

High quality public education is the single best investment a society can make to ensure its growth and prosperity.

CONNECTICUT STATE DEPARTMENT OF EDUCATION